

Управление двигателем и движением

Технические характеристики

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

эл.почта: agu@nt-rt.ru || сайт: <https://analog.nt-rt.ru/>



Custom Motor Control Solutions

Whether you need a standard module modified or a custom build from the ground up, Analog Devices, Inc. (ADI) can help you create the ideal custom motion control solution for your application. ADI Trinamic™ technologies transform digital information into precise physical motion, with proven performance across industries and applications such as cobots, advanced prosthetics, healthcare, and space. ADI engineers stand ready to help you bring your vision to life with our suite of ADI Trinamic motor control building blocks, enabling you to innovate and push the envelope of what's next in your industry.

Embedded Motion Control Modules

Parts	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features	typ
TMCM-1290	Single Axis Controller and Driver Module	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	4.5V to 36V	2.1		TMCL	RS-485, SPI	2x Reference Switch Input, A/B/N Incremental	A/B/N Incremental, CoolStep, Integrated Current Sensing, Integrated DC/DC, Microstep Table, Passive Braking, Ramp Generator, SpreadCycle, StallGuard2, StealthChop2, Temperature Sensor, TMCL, Trapezoidal	
TMCM-1690	Single Axis FOC Servo Controller Gate Driver Module	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	3-Phase BLDC, 3-Phase PMSM, DC	1	10V to 60V	-		TMCL	CAN, RS-485, UART	A/B/N Incremental, Digital Hall, SPI Encoder	A/B/N Incremental, Closed-Loop Control, Digital Hall, Field-Oriented Control, PWM (internal), Slope Control, TMCL, UART	
TMCM-1637-CANopen	Plug-In servo drive 10 to 30V, 5A, S-shaped and SixPoint ramp controller with CAN, RS485 and S/D Interface	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 30V	5		CANopen	CAN, RS-485, Step/Dir	A/B/N Incremental, Digital Hall	FOC, SixPoint, S-Shaped, Trapezoidal	
TMCM-1637-TMCL	Plug-In servo drive 10 to 30V, 5A, S-shaped and SixPoint ramp controller with CAN, RS485 and S/D Interface	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 30V	5		TMCL	CAN, RS-485, Step/Dir	A/B/N Incremental, Digital Hall	FOC, SixPoint, S-Shaped, Trapezoidal	
TMCM-1638-CANopen	Plug-In servo drive 10 to 52V, 7A, S-shaped and SixPoint ramp controller with CAN, RS485 and S/D Interface	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 52V	7		CANopen	CAN, RS-485, Step/Dir	A/B/N Incremental, Digital Hall	FOC, SixPoint, S-Shaped, Trapezoidal	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ
TMCM-1638-TMCL	Plug-In servo drive 10 to 52V, 7A, S-shaped and SixPoint ramp controller with CAN, RS485 and S/D Interface	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 52V	7	TMCL	CAN, RS-485, Step/Dir	A/B/N Incremental, Digital Hall	FOC, SixPoint, S-Shaped, Trapezoidal
TMCM-0930	Plug-In controller module to control up to four ADI Trinamic motor driver modules using TMCL commands.	RECOMMENDED FOR NEW DESIGNS	Plug-In Module	-	-	-	-	TMCL	CAN, GPIO, RS-485, USB	-	-
TMCM-1230-CANopen	Plug-In stepper motor controller/driver module 10 to 30V, 5A, 256 µSteps, SixPoint ramp controller with CAN, RS485 and S/D Interface, StallGuard, CoolStep, StealthChop	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 30V	5	CANopen	CAN, RS-485, Step/Dir	A/B/N Incremental	ChopSync, CoolStep, DcStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop2, Trapezoidal
TMCM-1230-TMCL	Plug-In stepper motor controller/driver module 10 to 30V, 5A, 256 µSteps, SixPoint ramp controller with CAN, RS485 and S/D Interface, StallGuard, CoolStep, StealthChop	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 30V	5	TMCL	CAN, RS-485, Step/Dir	A/B/N Incremental	ChopSync, CoolStep, DcStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop2, Trapezoidal
TMCM-1231-CANopen	Plug-In stepper motor controller/driver module 10 to 52V, 6.5A, 256 µSteps, SixPoint ramp controller with CAN, RS485 and S/D Interface, StallGuard, CoolStep, StealthChop	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 52V	6.5	CANopen	CAN, RS-485, Step/Dir	A/B/N Incremental	ChopSync, CoolStep, DcStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop2, Trapezoidal

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}
TMCM-1231-TMCL	Plug-In stepper motor controller/driver module 10 to 52V, 6.5A, 256 µSteps, SixPoint ramp controller with CAN, RS485 and S/D Interface, StallGuard, CoolStep, StealthChop	PRODUCTION	Plug-In Module	2-Phase Stepper	1	10V to 52V	6.5	TMCL	CAN, RS-485, Step/Dir	A/B/N Incremental	ChopSync, CoolStep, DcStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop2, Trapezoidal
TMCM-1636-24V-CANopen	Servo drive for 3-phase BLDC motors 12 to 28V, 30A, with CAN Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	12V to 28V	30	CANopen	CAN, GPIO, SPI	Hall Sensor, Incremental Quadrature, Reference / Stop Switch Input, SSI Encoder	FOC
TMCM-1636-24V-TMCL	Servo drive for 3-phase BLDC motors 12 to 28V, 30A, with CAN Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	12V to 28V	30	TMCL	CAN, GPIO, SPI	Hall Sensor, Incremental Quadrature, Reference / Stop Switch Input, SSI Encoder	FOC
TMCM-1636-48V-CANopen	Servo drive for 3-phase BLDC motors 12 to 28V, 30A, with CAN Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	12V to 60V	20	CANopen	CAN, GPIO, SPI	Hall Sensor, Incremental Quadrature, Reference / Stop Switch Input, SSI Encoder	FOC
TMCM-1636-48V-TMCL	Servo drive for 3-phase BLDC motors 12 to 28V, 30A, with CAN Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	12V to 60V	20	TMCL	CAN, GPIO, SPI	Hall Sensor, Incremental Quadrature, Reference / Stop Switch Input, SSI Encoder	FOC

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}
TMCM-1617-CANopen	Low-weight miniaturized servo drive for 3-phase BLDC motors 8 to 28V, 18A, with CAN and RS485 Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	8V to 28V	18	CANopen	CAN, EtherCAT, RS-485	A/B/N Incremental, Digital Hall, Reference / Stop Switch Input	Closed Loop, FOC
TMCM-1617-CoE	Low-weight miniaturized servo drive for 3-phase BLDC motors 8 to 28V, 18A, with CAN and RS485 Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	8V to 28V	18	CoE	CAN, EtherCAT, RS-485	A/B/N Incremental, Digital Hall, Reference / Stop Switch Input	Closed Loop, FOC
TMCM-1617-TMCL	Low-weight miniaturized servo drive for 3-phase BLDC motors 8 to 28V, 18A, with CAN and RS485 Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	8V to 28V	18	TMCL	CAN, EtherCAT, RS-485	A/B/N Incremental, Digital Hall, Reference / Stop Switch Input	Closed Loop, FOC
TMCM-1278-CANopen	Motor mountable stepper motor controller/driver module 12 to 48V, 9A, 256 µSteps, SixPoint ramp controller with CAN Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	12V to 48V	9	CANopen	CAN	A/B/N Incremental	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMCM-1278-TMCL	Motor mountable stepper motor controller/driver module 12 to 48V, 9A, 256 µSteps, SixPoint ramp controller with CAN Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	12V to 48V	9	TMCL	CAN	A/B/N Incremental	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}
TMC3351-CANopen	3-axis stepper motor controller/driver module 11to 28V, 3A, 256 µSteps, with USB, CAN and RS485, RS232 Interface, StallGuard, CoolStep and StealthChop	PRODUCTION	Multi-Axis Stepper Servo Module	2-Phase Stepper	3	11V to 28V	3	CANopen	CAN, RS-232, RS-485, SPI, USB	A/B/N Incremental, Reference / Stop Switch Input	ChopSync, Closed Loop, DcStep
TMC3351-TMCL	3-axis stepper motor controller/driver module 11to 28V, 3A, 256 µSteps, with USB, CAN and RS485, RS232 Interface, StallGuard, CoolStep and StealthChop	PRODUCTION	Multi-Axis Stepper Servo Module	2-Phase Stepper	3	11V to 28V	3	TMCL	CAN, RS-232, RS-485, SPI, USB	A/B/N Incremental, Reference / Stop Switch Input	ChopSync, Closed Loop, DcStep
TMC6214-CANopen	6-axis stepper motor controller/driver module 10 to 30V, 1.9A, 256 µSteps, SixPoint ramp controller, with USB, CAN and RS485, RS232 Interface, StallGuard, CoolStep and StealthChop	RECOMMENDED FOR NEW DESIGNS	Multi-Axis Stepper Motor Module	2-Phase Stepper	6	10V to 30V	1.9	CANopen	CAN, RS-232, RS-485, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, DcStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMC6214-TMCL	6-axis stepper motor controller/driver module 10 to 30V, 1.9A, 256 µSteps, SixPoint ramp controller, with USB, CAN and RS485, RS232 Interface, StallGuard, CoolStep and StealthChop	RECOMMENDED FOR NEW DESIGNS	Multi-Axis Stepper Motor Module	2-Phase Stepper	6	10V to 30V	1.9	TMCL	CAN, RS-232, RS-485, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, DcStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current typ RMS	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ
TMC1211	Motor mountable stepper motor controller/driver module 10 to 30V, 5.7A, 256 µSteps, SixPoint ramp controller with USB, S/D, and RS485 Interface, StallGuard, CoolStep, StealthChop	PRODUCTION	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	5.7	TMCL	GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, DcStep, MicroPlyer, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop2, Trapezoidal
TMC1316	Closed Loop Stepper motor controller/driver module 10 to 30V, 5.7A, 256 µSteps, S-Shaped and SixPoint ramp controller, with USB, RS485 and S/D Interface, StallGuard, CoolStep, StealthChop	PRODUCTION	Single-Axis Stepper Servo Module	2-Phase Stepper	1	10V to 30V	5.7	TMCL	GPIO, RS-485, Step/Dir, USB	A/B/N Incremental	Closed Loop, CoolStep, MicroPlyer, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop2, Trapezoidal
TMC1276-CANopen	Motor mountable stepper motor controller/driver module 10 to 30V, 3A, 256 µSteps, SixPoint ramp controller with CAN Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	3	CANopen	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMC1276-TMCL	Motor mountable stepper motor controller/driver module 10 to 30V, 3A, 256 µSteps, SixPoint ramp controller with CAN Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	3	TMCL	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMC1241-CANopen	Motor mountable stepper motor controller/driver module 10 to 30V, 3A, 256 µSteps, SixPoint ramp controller with USB, S/D, CAN and RS485 Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	3	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}
TMCM-1241-TMCL	Motor mountable stepper motor controller/driver module 10 to 30V, 3A, 256 µSteps, SixPoint ramp controller with USB, S/D, CAN and RS485 Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	3	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMCM-1260-CANopen	Motor mountable stepper motor controller/driver module 12 to 54V, 6A, 256 µSteps, SixPoint ramp controller with USB, S/D, CAN and RS485 Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	12V to 54V	6	CANopen	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMCM-1260-TMCL	Motor mountable stepper motor controller/driver module 12 to 54V, 6A, 256 µSteps, SixPoint ramp controller with USB, S/D, CAN and RS485 Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	12V to 54V	6	TMCL	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMCM-1240-CANopen	Motor mountable stepper motor controller/driver module 10 to 30V, 2ARMS, 256 µSteps, SixPoint ramp controller with USB, S/D, and RS485 Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	2	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current typ RMS	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ
TMCM-1240-TMCL	Motor mountable stepper motor controller/driver module 10 to 30V, 2ARMS, 256 μ Steps, SixPoint ramp controller with USB, S/D, and RS485 Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	2	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2
TMCM-3230-CANopen	3-axis plug-in stepper motor controller/driver module 9 to 28.5V, 1A, 256 μ Steps, SixPoint ramp controller, with USB, CAN and RS485 Interface, StallGuard, CoolStep and StealthChop	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	9V to 28.5V	1	CANopen	CAN, RS-232, RS-422, RS-485, SPI, UART, USB	A/B/N Incremental, Reference / Stop Switch Input	ChopSync, CoolStep, MicroPlyer, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal
TMCM-3230-TMCL	3-axis plug-in stepper motor controller/driver module 9 to 28.5V, 1A, 256 μ Steps, SixPoint ramp controller, with USB, CAN and RS485 Interface, StallGuard, CoolStep and StealthChop	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	9V to 28.5V	1	TMCL	CAN, RS-232, RS-422, RS-485, SPI, UART, USB	A/B/N Incremental, Reference / Stop Switch Input	ChopSync, CoolStep, MicroPlyer, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal
TMCM-1110	Stepper motor controller/driver module 10 to 00V, 2.8A, 256 μ Steps, with USB, S/D and RS485 Interface, StallGuard, CoolStep	PRODUCTION	Single-Axis Stepper Motor Module	2-Phase Stepper	1	10V to 30V	2.8	TMCL	GPIO, RS-485, Step/Dir, UART	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StealthChop, Trapezoidal

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ
TMCM-1111	Stepper motor controller/driver module 10 to 30V, 2.8A, 256 μ Steps, S-Shaped and SixPoint ramp controller, with USB, S/D and RS485 Interface, StallGuard, CoolStep	PRODUCTION	Single-Axis Stepper Servo Module	2-Phase Stepper	1	10V to 30V	2.8	TMCL	GPIO, RS-485, Step/Dir, UART	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	ChopSync, Closed Loop, CoolStep, DcStep, MicroPlyer, SixPoint, SpreadCycle, S-Shaped, StallGuard2, Trapezoidal
TMCM-1633	Servo drive for 3-phase BLDC motors 14.5 to 50V, 10A, with CAN and RS232 Interface	PRODUCTION	Single-Axis BLDC Servo Module	2-Phase Stepper	1	14.5V to 50V	10	CANopen, TMCL	CAN, RS-232	A/B/N Incremental, Current Sensing, Hall Sensor	Closed Loop, Slope Control
TMCM-1270-CANopen	Motor mountable stepper motor controller/driver module 6 to 23V, 1.2A, 256 μ Steps, SixPoint ramp controller with CAN Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	6V to 26V	1.2	CANopen	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal
TMCM-1270-TMCL	Motor mountable stepper motor controller/driver module 6 to 23V, 1.2A, 256 μ Steps, SixPoint ramp controller with CAN Interface, StallGuard, CoolStep, StealthChop	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	6V to 26V	1.2	TMCL	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal
TMCM-6212-CANopen	6-axis stepper motor controller/driver module 11 to 35V, 1.1A, 256 μ Steps, SixPoint ramp controller, with USB, CAN and RS485 Interface, StallGuard, CoolStep and StealthChop	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	6	11V to 35V	1.1	CANopen	CAN, RS-485, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, DcStep, MicroPlyer, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current typ RMS	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ
TMCM-6212-TMCL	6-axis stepper motor controller/driver module 11 to 35V, 1.1A, 256 μ Steps, SixPoint ramp controller, with USB, CAN and RS485 Interface, StallGuard, CoolStep and StealthChop	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	6	11V to 35V	1.1	TMCL	CAN, RS-485, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, DcStep, MicroPlyer, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal
TMCM-3212-CANopen	3-axis stepper motor controller/driver module 11 to 53V, 3A, 256 μ Steps, SixPoint ramp controller, with USB, CAN and RS485 Interface, StallGuard and CoolStep	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	11V to 53V	3	CANopen	CAN, RS-485, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, MicroPlyer, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal
TMCM-3212-TMCL	3-axis stepper motor controller/driver module 11 to 53V, 3A, 256 μ Steps, SixPoint ramp controller, with USB, CAN and RS485 Interface, StallGuard and CoolStep	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	11V to 53V	3	TMCL	CAN, RS-485, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, MicroPlyer, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal
TMCM-1140-CANopen	Motor mountable stepper motor controller/driver module 9 to 28V, 2A, 256 μ Steps, with USB, CAN and RS485 Interface, StallGuard, CoolStep	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	9V to 28V	2	CANopen	CAN, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal
TMCM-1140-TMCL	Motor mountable stepper motor controller/driver module 9 to 28V, 2A, 256 μ Steps, with USB, CAN and RS485 Interface, StallGuard, CoolStep	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	9V to 28V	2	TMCL	CAN, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features	typ
TMCM-1160-CANopen	Motor mountable stepper motor controller/driver module 9 to 51V, 2.8A, 256 µSteps, with USB, CAN and RS485 Interface, StallGuard, CoolStep	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	9V to 51V	2.8		CANopen	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	
TMCM-1160-TMCL	Motor mountable stepper motor controller/driver module 9 to 51V, 2.8A, 256 µSteps, with USB, CAN and RS485 Interface, StallGuard, CoolStep	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	9V to 51V	2.8		TMCL	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	
TMCM-1180-CANopen	Motor mountable stepper motor controller/driver module 18 to 55V, 5.5A, 256 µSteps, with USB, S/D, RS232 and RS485 Interface, StallGuard, CoolStep	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	18V to 55V	5.5		CANopen	CAN, RS-232, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	
TMCM-1180-TMCL	Motor mountable stepper motor controller/driver module 18 to 55V, 5.5A, 256 µSteps, with USB, S/D, RS232 and RS485 Interface, StallGuard, CoolStep	RECOMMENDED FOR NEW DESIGNS	Single-Axis Stepper Motor Module	2-Phase Stepper	1	18V to 55V	5.5		TMCL	CAN, RS-232, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	
TMCM-1640	Motor mountable Servo drive for 3-phase BLDC motors 12 to 28.5V, 5A, with RS485 Interface	RECOMMENDED FOR NEW DESIGNS	Single-Axis BLDC Servo Module	2-Phase Stepper	1	12V to 28.5V	5		TMCL	RS-485, USB	A/B/N Incremental, Hall Sensor	Slope Control	
TMCM-3110-CANopen	3-axis stepper motor controller/driver module 9 to 52V, 2.8A, 256 µSteps with USB, CAN and RS485 Interface, StallGuard and CoolStep	RECOMMENDED FOR NEW DESIGNS	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	9V to 52V	2.8		CANopen	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ
TMCM-3110-TMCL	3-axis stepper motor controller/driver module 9 to 52V, 2.8A, 256 μ Steps with USB, CAN and RS485 Interface, StallGuard and CoolStep	RECOMMENDED FOR NEW DESIGNS	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	9V to 52V	2.8	TMCL	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal
TMCM-343	3-axis plug-in stepper motor controller/driver module 7 to 34V, 1.1A, 64 μ Steps, with CAN and UART Interface	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	7V to 34V	1.1	CANopen, TMCL	CAN, UART	Reference / Stop Switch Input	ChopSync, StallGuard, Trapezoidal
TMCM-351	3-Axis Stepper Controller / Driver, 2.8 A/24 V	PRODUCTION	Multi-Axis Stepper Motor Module	2-Phase Stepper	3	7V to 28.5V	2.8	CANopen, TMCL	CAN, RS-232, RS-485, USB	A/B/N Incremental, Reference / Stop Switch Input	ChopSync, StallGuard, Trapezoidal

Motor Driver and Motion Controller ICs

Parts	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS ^{typ}	Microsteps ^{typ}	Communication Interface	Feedback Interface	Motion Control Features ^{typ}
MAX22217	Quad Smart Serial-Controlled Solenoid and Motor Driver with Advanced Diagnostic	RECOMMENDED FOR NEW DESIGNS	Solenoid Driver	Brushed, Solenoid	-	4.5V to 36V	550m	-	SPI	-	Integrated Current Sensing, Internal CR Reference
TMC8100	Universal Encoder Bus Controller	RECOMMENDED FOR NEW DESIGNS	Motor Encoder Interface	-	1	2.25V to 5.5V	-	-	SPI, UART	A/B/N Incremental, BiSS-C, EnDat 2.X, SPI Encoder, SSI Encoder	-
MAX22212	36V, 7.6A High Current Single H-Bridge with Integrated Current Sense	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed, Solenoid	-	4.5V to 36V	4	-	-	-	Current Limiter, Integrated Current Sensing, PWM (internal)
MAX22216	Quad Smart Serial-Controlled Solenoid and Motor Driver with Advanced Diagnostic	RECOMMENDED FOR NEW DESIGNS	Solenoid Driver	Brushed, Solenoid	-	4.5V to 36V	1.7	-	SPI	-	Integrated Current Sensing, Internal CR Reference
MAX22208	65V, 3.8A Quad Half H-Bridge Drivers with Integrated Current Sense	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed, Solenoid	-	4.5V to 65V	2	-	-	-	Integrated Current Sensing, Single & Dual Motor Options
MAX22213	36V, 3.8A Quad Half H-Bridge Drivers with Integrated Current Sense	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed, Solenoid	-	4.5V to 36V	2	-	-	-	Integrated Current Sensing, Single & Dual Motor Options
MAX22210	36V, 3.8A Stepper Motor Driver with Integrated Current Sense and 128 Microstep Indexer	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	2	4.5V to 36V	2	128	-	-	Current Limiter, Direct Phase Control, Integrated Current Sensing, Step/Dir

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	Microsteps	Communication Interface	Feedback Interface	Motion Control Features
MAX22211	36V, 3.8A Two H-Bridge for Dual Brushed or Single Stepper Motor Drive	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed, Stepper	-	4.5V to 36V	2	-	-	-	Integrated Current Sensing
TMC2130-LA	Silent stepper motor driver 5 to 46V, up to 1.2A with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard and StealthChop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 46V	1.2	256	SPI, Step/Dir	-	ChopSync, CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop
TMC2130-TA	Silent stepper motor driver 5 to 46V, up to 1.2A with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard and StealthChop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 46V	1.4	256	SPI, Step/Dir	-	ChopSync, CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop
TMC2202	Silent stepper motor driver 5 to 36V, up to 1.4A with S/D and UART Interface, 256 µSteps, SpreadCycle and Stealthchop	PRODUCTION	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 36V	1.4	256	Step/Dir, UART	-	MicroPlyer, SpreadCycle, StealthChop
TMC2210ATJ+	Silent stepper motor driver 4.5 to 36V, up to 2.1A with S/D Interface, 256 µSteps, SpreadCycle and Stealthchop2	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	4.5V to 36V	2.1	256	Step/Dir	-	MicroPlyer, Passive Braking, SpreadCycle, StealthChop2
TMC2210AUU+	Silent stepper motor driver 4.5 to 36V, up to 2.1A with S/D Interface, 256 µSteps, SpreadCycle and Stealthchop2	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	4.5V to 36V	2.1	256	Step/Dir	-	MicroPlyer, Passive Braking, SpreadCycle, StealthChop2

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Microsteps	typ	Communication Interface	Feedback Interface	Motion Control Features	typ
TMC5240ATJ+	Silent stepper motor cDriver 4.5 to 36V, up to 2.1A with SPI Interface, 256 µSteps, SixPoint ramp controller SpreadCycle and Stealthchop2	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper	1	4.5V to 36V	2.1		256		SPI, UART	A/B/N Incremental	CoolStep, MicroPlyer, Passive Braking, SpreadCycle, StallGuard2, StallGuard4, StealthChop2	
TMC5240AUU+	Silent stepper motor cDriver 4.5 to 36V, up to 2.1A with SPI Interface, 256 µSteps, SixPoint ramp controller SpreadCycle and Stealthchop2	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper	1	4.5V to 36V	2.1		256		SPI, UART	A/B/N Incremental	CoolStep, MicroPlyer, Passive Braking, SpreadCycle, StallGuard2, StallGuard4, StealthChop2	
TMC2100-LA	Silent stepper motor driver 5 to 46V, up to 1.2A with S/D Interface, 256 µSteps, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 46V	1.2		256		Step/Dir	-	MicroPlyer, SpreadCycle, StealthChop	
TMC2100-TA	Silent stepper motor driver 5 to 46V, up to 1.2A with S/D Interface, 256 µSteps, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 46V	1.4		256		Step/Dir	-	MicroPlyer, SpreadCycle, StealthChop	
TMC2208	Silent stepper motor driver 5 to 36V, up to 1.4A with S/D and UART Interface, 256 µSteps, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 36V	1.4		256		Step/Dir, UART	-	MicroPlyer, SpreadCycle, StealthChop	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Microsteps	typ	Communication Interface	Feedback Interface	Motion Control Features	typ
TMC2240ATJ+	36V 2ARMS+ Smart Integrated Stepper Driver with S/D and SPI	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	4.5V to 36V		2.1	256		Single Wire UART, SPI, Step/Dir	A/B/N Incremental	CoolStep, MicroPlyer, Passive Braking, SpreadCycle, StallGuard2, StallGuard4, StealthChop2	
TMC2240AUU+	36V 2ARMS+ Smart Integrated Stepper Driver with S/D and SPI	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	4.5V to 36V		2.1	256		Single Wire UART, SPI, Step/Dir	A/B/N Incremental	CoolStep, MicroPlyer, Passive Braking, SpreadCycle, StallGuard2, StallGuard4, StealthChop2	
TMC429-I	Triple Stepper Motor Ramp Generator Controller with Serial Peripheral Interfaces and Step/Direction	RECOMMENDED FOR NEW DESIGNS	Motion Control and Interface Controller	2-Phase Stepper	3	-		-	-		SPI	-	Microstep Table, Ramp Generator	
TMC429-LI	Triple Stepper Motor Ramp Generator Controller with Serial Peripheral Interfaces and Step/Direction	RECOMMENDED FOR NEW DESIGNS	Motion Control and Interface Controller	2-Phase Stepper	3	-		-	-		SPI, Step/Dir	-	Microstep Table, Ramp Generator	
TMC429PI24	Triple Stepper Motor Ramp Generator Controller with Serial Peripheral Interfaces and Step/Direction	RECOMMENDED FOR NEW DESIGNS	Motion Control and Interface Controller	2-Phase Stepper	3	-		-	-		SPI	-	Microstep Table, Ramp Generator	
MAX22204	65V, 3.8A Stepper Motor Driver with Integrated Current-Sense and 128 Usteps Indexer	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Stepper	-	4.5V to 65V		2	-		-	-	Integrated Current Sensing, Internal CR Reference	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Microsteps	typ	Communication Interface	Feedback Interface	Motion Control Features	typ
MAX22205	65V, 7.6A High Current Single H-Bridge with Integrated Current Sense	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed, Stepper	-	4.5V to 65V		4	-		-	-	Integrated Current Sensing, Internal CR Reference	
MAX22203	65V, 3.8A Dual Brushed or Single Stepper Motor Driver with Integrated Current Sense	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed, Stepper	-	4.5V to 36V		2	-		-	-	Integrated Current Sensing, Internal CR Reference	
MAX22200	36V, 1A Octal Integrated Serial-Controlled Solenoid and Motor Driver	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed, Solenoid	-	4.5V to 36V		1	-		-	-	Integrated Current Sensing, Internal CR Reference	
MAX22201	36V, 3.5A Brushed Motor Driver with Integrated Current Sense	PRODUCTION	DC Motor Driver	Brushed	-	3V to 36V		2	-		-	-	Integrated Current Sensing, Internal CR Reference	
MAX22202	36V, 3.5A Brushed Motor Driver with Integrated Current Sense	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed	-	3V to 36V		2	-		-	-	Integrated Current Sensing	
MAX22207	36V, 3.5A Brushed Motor Driver with Integrated Current Sense	RECOMMENDED FOR NEW DESIGNS	DC Motor Driver	Brushed	-	3V to 36V		2	-		-	-	Integrated Current Sensing	
TMC6140	Low voltage BLDC motor driver 5 to 30V, for external N-channel MOSFETs, integrated lowside chargepump for low RDSon at low battery voltage	RECOMMENDED FOR NEW DESIGNS	3-Phase Predriver IC	3-Phase BLDC, 3-Phase PMSM	1	5V to 30V		-	-		PWM, UART	Bottom Shunt	-	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Microsteps	typ	Communication Interface	Feedback Interface	Motion Control Features	typ
TMC2226	Silent stepper motor driver 5 to 36V, up to 1.4A with S/D and UART Interface, 256 µSteps, SpreadCycle and Stealthchop2	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 29V		2	256		Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard4, StealthChop2	
TMC4671	Fully integrated servo controller, providing Field Oriented Control for BLDC/PMSM and 2-phase Stepper Motors as well as DC motors and voice coils.	RECOMMENDED FOR NEW DESIGNS	Servo Controller IC	2-Phase Stepper, 3-Phase BLDC, 3-Phase PMSM, Brushed DC, Solenoid	1	-		-	-		GPIO, PWM, SPI, Step/Dir, UART	Analog Hall, Analog Sin/Cos, Digital Hall	FOC	
TMC6100	Low voltage BLDC motor driver 8 to 60V, for external N-channel MOSFETs up to 1.5A gate current	RECOMMENDED FOR NEW DESIGNS	3-Phase Predriver IC	3-Phase BLDC, 3-Phase PMSM	1	8V to 60V		-	-		PWM, SPI	Hall Sensor	-	
TMC6300	Highly Efficient Low Voltage, Zero Standby Current Driver for 3-Phase BLDC/PMSM Motors up to 2A peak, Triple Half-Bridge with separate HS and LS control signals	RECOMMENDED FOR NEW DESIGNS	BLDC Motor Driver	3-Phase BLDC, 3-Phase PMSM	1	2V to 11V		1.4	-		6 Line HS & LS	Bottom Shunt	-	
TMC7300	Low voltage DC motor driver for one or two motors, up to 2A, UART torque control.	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	Brushed	2	2V to 11V		2	-		PWM, UART	-	StealthChop	
TMC2225	Silent stepper motor driver 5 to 36V, up to 1.4A with S/D and UART Interface, 256 µSteps, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 36V		1.4	256		Step/Dir, UART	-	MicroPlyer, SpreadCycle, StealthChop2	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS typ	Microsteps typ	Communication Interface	Feedback Interface	Motion Control Features typ
TMC2300	Low voltage silent stepper motor driver 2...11V, up to 1.2A with zero standby current 256 µSteps, CoolStep, StallGuard2 and StealthChop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	2V to 11V	1.2	256	Digital, Step/Dir, UART	-	CoolStep, MicroPlyer, StallGuard4, StealthChop2
TMC262	Stepper motor driver 5 to 60V, for external P/N-Fets with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard2 and SpreadCycle.	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Gate Driver	2-Phase Stepper	1	5V to 60V	-	256	SPI, Step/Dir	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2
TMC2209	Silent stepper motor driver 5 to 29V, up to 1.4A with S/D and UART Interface, 256 µSteps, SpreadCycle and Stealthchop2	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 29V	2	256	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard4, StealthChop
TMC2590	Stepper motor driver 7 TO 34V, for external P/N-Fets with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard2 and SpreadCycle	PRODUCTION	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 60V	-	-	SPI, Step/Dir	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2
TMC2160	Stepper motor driver 8 to 60V, for external N-Fets with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard2, SpreadCycle and StealthChop2	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Gate Driver	2-Phase Stepper, Brushed DC, Solenoid	1	8V to 60V	-	256	SPI, Step/Dir	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop2

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS typ	Microsteps typ	Communication Interface	Feedback Interface	Motion Control Features typ
TMC6200	Low voltage BLDC motor driver 8 to 60V, for external N-channel MOSFETs up to 1.5A gate current, Inline current sense	RECOMMENDED FOR NEW DESIGNS	3-Phase Predriver IC	3-Phase BLDC, 3-Phase PMSM	1	8V to 60V	-	-	PWM, SPI	Hall Sensor	-
MAX14874	4.5V to 36V Dual Relay/Valve/Motor Driver	PRODUCTION	DC Motor Driver	Brushed	-	4.5V to 36V	-	-	-	-	Internal CR Reference
TMC5160A-TA	Stepper motor cDriver 8 to 60V, for external N-Fets with S/D and SPI Interface, 256 µSteps, SixPoint ramp controller, CoolStep, StallGuard2, SpreadCycle and StealthChop2	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper, Brushed DC, Solenoid	1	8V to 60V	-	256	SPI, Step/Dir, UART	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop2
TMC5160A-WA	Stepper motor cDriver 8 to 60V, for external N-Fets with S/D and SPI Interface, 256 µSteps, SixPoint ramp controller, CoolStep, StallGuard2, SpreadCycle and StealthChop2	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper, Brushed DC, Solenoid	1	8V to 60V	-	256	SPI, Step/Dir, UART	A/B/N Incremental, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop2
TMC2224	Silent stepper motor driver 5 to 36V, up to 1.4A with S/D and UART Interface, 256 µSteps, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 36V	1.4	256	Step/Dir, UART	-	MicroPlyer, SpreadCycle, StealthChop2
TMC249A-LA	Stepper motor driver 7 to 34V, for external P/N-Fets with SPI Interface, 64 µSteps	PRODUCTION	Stepper Motor Gate Driver	2-Phase Stepper	1	7V to 36V	-	64	SPI	-	ChopSync, StallGuard

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Microsteps	typ	Communication Interface	Feedback Interface	Motion Control Features	typ
TMC249A-SA	Stepper motor driver 7 to 34V, for external P/N-Fets with SPI Interface, 64 µSteps	PRODUCTION	Stepper Motor Gate Driver	2-Phase Stepper	1	7V to 36V	-		64		SPI	-	ChopSync, StallGuard	
TMC236	Stepper motor driver 7 to 34V, up to 1.1A with SPI Interface, 64 µSteps	PRODUCTION	Stepper Motor Driver IC	2-Phase Stepper	1	7V to 34V	1.1		64		SPI	-	ChopSync	
TMC239	Stepper motor driver 7 to 34V, for external P/N-Fets with SPI Interface, 64 µSteps	PRODUCTION	Stepper Motor Gate Driver	2-Phase Stepper	1	7V to 34V	-		64		SPI	-	ChopSync	
TMC246	Stepper motor driver 7 to 34V, up to 1.1A with SPI Interface, 64 µSteps	PRODUCTION	Stepper Motor Driver IC	2-Phase Stepper	1	7V to 34V	1.1		64		SPI	-	ChopSync, StallGuard	
TMC260	Stepper motor driver 5 to 40V, up to 1.4A with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard2 and SpreadCycle	PRODUCTION	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 40V	1.4		256		SPI, Step/Dir	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2	
TMC261	Stepper motor driver 5 to 60V, up to 1.4A with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard2 and SpreadCycle	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 60V	1.4		256		SPI, Step/Dir	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2	
TMC2660	Stepper motor driver 5 to 30V, up to 2.8A with S/D and SPI Interface, 256 µSteps, CoolStep, StallGuard2 and SpreadCycle	RECOMMENDED FOR NEW DESIGNS	Stepper Motor Driver IC	2-Phase Stepper	1	5V to 30V	2.8		256		SPI, Step/Dir	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Microsteps	typ	Communication Interface	Feedback Interface	Motion Control Features	typ
TMC4210	Stepper Motor Ramp Generator Controller with Serial Peripheral Interfaces and Step/Direction	PRODUCTION	Motion Control and Interface Controller	2-Phase Stepper	1	-	-	-	-	-	SPI, Step/Dir	-	Ramp Generator	
TMC4361	S-shaped ramp and SixPoint ramp motion controller for stepper motors with SPI and Step/Dir interfaces, and an encoder interface for closed-loop operation	RECOMMENDED FOR NEW DESIGNS	Motion Control and Interface Controller	2-Phase Stepper, 3-Phase BLDC, 3-Phase PMSM	1	-	-	-	-	-	PWM, SPI, SSI, Step/Dir	A/B/N Incremental, SPI Encoder, SSI Encoder	ChopSync, Closed Loop, DcStep, Ramp Generator	
TMC457	S-shaped ramp motion controller for stepper motors and piezo motors with SPI interface	RECOMMENDED FOR NEW DESIGNS	Motion Control and Interface Controller	2-Phase Stepper	1	-	-	-	-	-	SPI, Step/Dir	A/B/N Incremental	Microstep Table, Ramp Generator	
TMC5031	Dual silent stepper motor cDriver 5 to 16V, up to 1.1A with SPI Interface, 256 µSteps, SixPoint ramp controller, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper	2	5V to 16V	1.1	256			SPI	-	ChopSync, CoolStep, Ramp Generator, SpreadCycle, StallGuard2	
TMC5041	Dual silent stepper motor cDriver 5 to 26V, up to 1.1A with SPI Interface, 256 µSteps, SixPoint ramp controller, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper	2	5V to 26V	1.1	256			SPI	-	ChopSync, CoolStep, Ramp Generator, SpreadCycle, StallGuard2	
TMC5062	Dual silent stepper motor cDriver 5 to 16V, up to 1.1A with SPI Interface, 256 µSteps, SixPoint ramp controller, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper	2	5V to 20V	1.1	256			SPI, UART	A/B/N Incremental	ChopSync, CoolStep, DcStep, Ramp Generator, SpreadCycle, StallGuard2	

	Description	Product Lifecycle	Primary Function	Motor Type	# of Axes	Supply Voltage Range	Phase Current RMS	typ	Microsteps	typ	Communication Interface	Feedback Interface	Motion Control Features	typ
TMC5072	Dual silent stepper motor cDriver 5 to 20V, up to 1.1A with SPI Interface, 256 µSteps, SixPoint ramp controller, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper, 3-Phase BLDC, 3-Phase PMSM, Brushed DC, Solenoid	2	5V to 26V		1.1	256		SPI, Step/Dir, UART	-	ChopSync, CoolStep, DcStep, Ramp Generator, SpreadCycle, StallGuard2	
TMC5130	Silent stepper motor cDriver 4.75 to 46V, up to 1.4ARMS with SPI Interface, 256 µSteps, SixPoint ramp controller, SpreadCycle and Stealthchop	RECOMMENDED FOR NEW DESIGNS	cDriver Stepper Motor Driver with Motion Control	2-Phase Stepper, Brushed DC, Solenoid	1	5V to 46V		1.4	256		SPI, Step/Dir, UART	A/B/N Incremental	ChopSync, CoolStep, MicroPlyer, Ramp Generator, SpreadCycle, StallGuard2, StealthChop	
TMC8462	EtherCAT® Slave Controller with integrated Phys	RECOMMENDED FOR NEW DESIGNS	EtherCAT Slave Controller IC	-	-	-		-	-		GPIO, PWM, Step/Dir	A/B/N Incremental	2x Integrated PHY, A/B/N Incremental, Distributed Clocks, High Voltage Features, IIC, Integrated DC/DC, Step/Dir	
MAX14870	Compact 4.5V to 36V Full-Bridge DC Motor Drivers	PRODUCTION	DC Motor Driver	Brushed	-	4.5V to 36V		-	-		-	-	Internal CR Reference	
MAX14871	4.5V to 36V Full-Bridge DC Motor Driver	PRODUCTION	DC Motor Driver	Brushed	-	4.5V to 36V		-	-		-	-	Internal CR Reference	
MAX14872	Compact 4.5V to 36V Full-Bridge DC Motor Drivers	PRODUCTION	DC Motor Driver	Brushed	-	4.5V to 36V		-	-		-	-	Internal CR Reference	

Motor Encoders

Parts	Description	Product Lifecycle	Resolution	Hollow Diameter	Housing Diameter	Motion Control Features	typ
TMCS-20-4-8K-AT-01	8192 lines A/B/N encoder with 20mm housing diameter for 4mm shaft diameter	RECOMMENDED FOR NEW DESIGNS	32768 Increments	4mm	20mm	A/B/N Incremental, TTL Level	
TMCS-28-5-10k-AT-01	10.000 lines A/B/N encoder with 28mm housing diameter for 5mm shaft diameter	RECOMMENDED FOR NEW DESIGNS	40000 Increments	5mm	28mm	A/B/N Incremental, TTL Level	
TMCS-28-5-1k-AT-01	10.000 lines A/B/N encoder with 28mm housing diameter for 5mm shaft diameter	RECOMMENDED FOR NEW DESIGNS	4096 Increments	5mm	28mm	A/B/N Incremental, TTL Level	
TMCS-28-6.35-10k-AT-01	10.000 lines A/B/N encoder with 28mm housing diameter for 5mm shaft diameter	RECOMMENDED FOR NEW DESIGNS	40000 Increments	6mm	28mm	A/B/N Incremental, TTL Level	
TMCS-28-6.35-1k-AT-01	10.000 lines A/B/N encoder with 28mm housing diameter for 5mm shaft diameter	RECOMMENDED FOR NEW DESIGNS	4096 Increments	6mm	28mm	A/B/N Incremental, TTL Level	
TMCS-40-6.35-10K-AT-01	10.000 lines A/B/N encoder with 40mm housing diameter for 6.35mm shaft diameter	RECOMMENDED FOR NEW DESIGNS	40000 Increments	6mm	40mm	A/B/N Incremental, TTL Level	

PANdrive Smart Motors

Parts	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD42-1-1243-IOLINK	NEMA 17 smart stepper motor 22Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	17	42	27	6V to 28V	1.2	-	IO-Link	Analog Hall	CoolStep, SpreadCycle, StallGuard2, StealthChop2	256	60
PD57-1-1378-CANopen	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	23	57	55	12V to 52V	9	CANopen	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	65
PD57-1-1378-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	23	57	55	12V to 52V	9	TMCL	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	65
PD57-2-1378-CANopen	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	23	57	101	12V to 52V	9	CANopen	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	75

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD57-2-1378-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	23	57	101	12V to 52V	9	TMCL	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	75
PD60-3-1378-CANopen	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	24	60	210	12V to 52V	9	CANopen	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	89
PD60-3-1378-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	24	60	210	12V to 52V	9	TMCL	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	89
PD60-4-1378-CANopen	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	24	60	310	12V to 52V	9	CANopen	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	110

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD60-4-1378-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	24	60	310	12V to 52V	9	TMCL	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	110
PD60-4H-1278-CANOPEN	NEMA 24 smart stepper motor 12 to 52V, 3Nm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	24	-	300	12V to 48V	9	CANopen	CAN	A/B/N Incremental	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	113
PD60-4H-1278-TMCL	NEMA 24 smart stepper motor 12 to 52V, 3Nm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	24	-	300	12V to 48V	9	TMCL	CAN	A/B/N Incremental	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	113
PD60-4H-1378-CANopen	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	24	60	300	12V to 52V	9	CANopen	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	110

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD60-4H-1378-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	24	60	300	12V to 52V	9	TMCL	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	110
PD86-3-1278-CANOPEN	NEMA 24 smart stepper motor 12 to 52V, 3Nm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	34	-	700	12V to 48V	9	CANopen	CAN	A/B/N Incremental	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	124
PD86-3-1278-TMCL	NEMA 24 smart stepper motor 12 to 52V, 3Nm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	34	-	700	12V to 48V	9	TMCL	CAN	A/B/N Incremental	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	124
PD86-3-1378-CANopen	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	34	86	700	12V to 52V	9	CANopen	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	120

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD86-3-1378-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with CAN interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	34	86	700	12V to 52V	9	TMCL	CAN, UART, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, S-Shaped, StallGuard2, StealthChop, Trapezoidal	256	120
PD57-1-1076	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with S/D and UART interface, StallGuard2, CoolStep and StealthChop	PRODUCTION	Smart Stepper Motors with Step/Direction	2-Phase Stepper	23	57	55	10V to 30V	3	TMCL	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop	256	54
PD57-1-1276-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	23	57	55	10V to 30V	3	CANopen	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	54
PD57-1-1276-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	55	10V to 30V	3	TMCL	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	54

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD57-2-1076	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with S/D and UART interface, StallGuard2, CoolStep and StealthChop	PRODUCTION	Smart Stepper Motors with Step/Direction	2-Phase Stepper	23	57	101	10V to 30V	3	TMCL	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop	256	64
PD57-2-1276-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	23	57	101	10V to 30V	3	CANopen	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	64
PD57-2-1276-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	101	10V to 30V	3	TMCL	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	64
PD60-3-1076	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with S/D and UART interface, StallGuard2, CoolStep and StealthChop	PRODUCTION	Smart Stepper Motors with Step/Direction	2-Phase Stepper	24	60	210	10V to 30V	3	TMCL	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop	256	78

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD60-3-1276-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	24	60	210	10V to 30V	3	CANopen	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	78
PD60-3-1276-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	210	10V to 30V	3	TMCL	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	78
PD60-4-1076	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with S/D and UART interface, StallGuard2, CoolStep and StealthChop	PRODUCTION	Smart Stepper Motors with Step/Direction	2-Phase Stepper	24	60	310	10V to 30V	3	TMCL	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop	256	99
PD60-4-1276-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	24	60	310	10V to 30V	3	CANopen	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	99

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD60-4-1276-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	310	10V to 30V	3	TMCL	CAN	A/B/N Incremental, Analog Hall	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	99
PD42-3-1241-CANOPEN	NEMA 17 smart stepper motor 10 to 30V, 40Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	40	10V to 30V	-	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	-	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	42
PD42-3-1241-TMCL	NEMA 17 smart stepper motor 10 to 30V, 40Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	40	10V to 30V	-	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	-	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	42

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD42-4-1241-CANOPEN	NEMA 17 smart stepper motor 10 to 30V, 40Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	80	10V to 30V	-	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	-	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	42
PD42-4-1241-TMCL	NEMA 17 smart stepper motor 10 to 30V, 40Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	80	10V to 30V	-	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	-	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	42
PD42-1-1370-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with RS485 interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	17	42	22	9V to 28V	-	TMCL	RS-485	-	Closed Loop, CoolStep, SpreadCycle, S-Shaped, StallGuard2	256	47
PD42-1-1670-CANOPEN	NEMA 17 smart BLDC servo motor 10 to 28V, 6.25Ncm, 4000RPM, with CAN interface, SensOstep and Field Orientd Control	PRODUCTION	Smart BLDC Motor with Field Oriented Control	3-Phase BLDC	-	42	-	10V to 28V	1.78	CANopen	CAN	Analog Hall	Closed Loop, FOC	-	53

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD42-1-1670-TMCL	NEMA 17 smart BLDC servo motor 10 to 28V, 6.25Ncm, 4000RPM, with CAN interface, SensOstep and Field Orientd Control	PRODUCTION	Smart BLDC Motor with Field Oriented Control	3-Phase BLDC	-	42	-	10V to 28V	1.78	TMCL	CAN	Analog Hall	Closed Loop, FOC	-	53
PD42-2-1370-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with RS485 interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	17	42	36	9V to 28V	-	TMCL	RS-485	-	Closed Loop, CoolStep, SpreadCycle, S-Shaped, StallGuard2	256	51
PD42-2-1670-CANOPEN	NEMA 17 smart BLDC servo motor 10 to 28V, 6.25Ncm, 4000RPM, with CAN interface, SensOstep and Field Orientd Control	PRODUCTION	Smart BLDC Motor with Field Oriented Control	3-Phase BLDC	-	42	-	10V to 28V	3.48	CANopen	CAN	Analog Hall	Closed Loop, FOC	-	73
PD42-3-1670-TMCL	NEMA 17 smart BLDC servo motor 10 to 28V, 6.25Ncm, 4000RPM, with CAN interface, SensOstep and Field Orientd Control	PRODUCTION	Smart BLDC Motor with Field Oriented Control	3-Phase BLDC	-	42	-	10V to 28V	3.48	TMCL	CAN	Analog Hall	Closed Loop, FOC	-	73
PD42-3-1370-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with RS485 interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	17	42	44	9V to 28V	-	TMCL	RS-485	-	Closed Loop, CoolStep, SpreadCycle, S-Shaped, StallGuard2	256	60

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD42-3-1670-CANOPEN	NEMA 17 smart BLDC servo motor 10 to 28V, 6.25Ncm, 4000RPM, with CAN interface, SensOstep and Field Orientd Control	PRODUCTION	Smart BLDC Motor with Field Oriented Control	3-Phase BLDC	-	42	-	10V to 28V	5.14	CANopen	CAN	Analog Hall	Closed Loop, FOC	-	93
PD42-3-1670-TMCL	NEMA 17 smart BLDC servo motor 10 to 28V, 6.25Ncm, 4000RPM, with CAN interface, SensOstep and Field Orientd Control	PRODUCTION	Smart BLDC Motor with Field Oriented Control	3-Phase BLDC	-	42	-	10V to 28V	5.14	TMCL	CAN	Analog Hall	Closed Loop, FOC	-	93
PD42-4-1370-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, S-Shaped and SixPoint ramp controller with RS485 interface, closed loop	PRODUCTION	Closed-Loop Smart Stepper Motor	2-Phase Stepper	17	42	70	9V to 28V	-	TMCL	RS-485	-	Closed Loop, CoolStep, SpreadCycle, S-Shaped, StallGuard2	256	-
PD57-1-1260-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	23	57	55	12V to 54V	6	CANopen	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	69

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD57-1-1260-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	55	12V to 54V	6	TMCL	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	69
PD57-2-1260-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	23	57	101	12V to 54V	6	CANopen	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	79
PD57-2-1260-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	101	12V to 54V	6	TMCL	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	79

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD60-3-1260-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	24	60	210	12V to 54V	6	CANopen	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	93
PD60-3-1260-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	210	12V to 54V	6	TMCL	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	93
PD60-4-1260-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	24	60	310	12V to 54V	6	CANopen	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	114

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD60-4-1260-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	310	12V to 54V	6	TMCL	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	114
PD86-3-1260-CANOPEN	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	34	86	700	12V to 54V	6	CANopen	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	126
PD86-3-1260-TMCL	NEMA 23 smart stepper motor 12 to 52V, 55Ncm, 256 µSteps, SixPoint ramp controller with USB, S/D RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	34	86	700	12V to 54V	6	TMCL	CAN, RS-485, Step/Dir, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	126

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD42-1-1240-CANOPEN	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	22	10V to 30V	2	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	46
PD42-1-1240-TMCL	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	22	10V to 30V	2	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	46
PD42-2-1240-CANOPEN	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	36	10V to 30V	2	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	51

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD42-2-1240-TMCL	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	36	10V to 30V	2	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	51
PD42-3-1240-CANOPEN	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	44	10V to 30V	2	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	60
PD42-3-1240-TMCL	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	44	10V to 30V	2	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	60

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD42-4-1240-CANOPEN	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	70	10V to 30V	2	CANopen	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	73
PD42-4-1240-TMCL	NEMA 17 smart stepper motor 10 to 30V, 22Ncm, 256 µSteps, SixPoint ramp controller, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	70	10V to 30V	2	TMCL	CAN, GPIO, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall	CoolStep, DcStep, SensOstep, SixPoint, SpreadCycle, StallGuard2, StealthChop2	256	73
PD42-1-1270-CANOPEN	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	27	6V to 28V	1.2	CANopen	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal	256	45
PD42-1-1270-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	27	6V to 28V	1.2	TMCL	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal	256	45

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD42-2-1270-CANOPEN	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	35	6V to 28V	1.2	CANopen	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal	256	50
PD42-2-1270-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	35	6V to 28V	1.2	TMCL	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal	256	50
PD42-3-1270-CANOPEN	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	49	6V to 28V	1.2	CANopen	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal	256	59
PD42-3-1270-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, SixPoint ramp controller with CAN interface, SensOstep, StallGuard2 and CoolStep, StealthChop	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	49	6V to 28V	1.2	TMCL	CAN	Reference / Stop Switch Input	CoolStep, SixPoint, SpreadCycle, StallGuard2, StealthChop, Trapezoidal	256	59

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD42-1-1070	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with S/D and UART interface, StallGuard2, CoolStep and StealthChop	PRODUCTION	Smart Stepper Motors with Step/Direction	2-Phase Stepper	17	42	27	9V to 24V	1.2	TMCL	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop	256	35
PD42-1-1141	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB andRS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	17	42	27	9V to 28V	2	TMCL	GPIO, RS-485, Step/Dir, USB	Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	47
PD42-2-1070	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with S/D and UART interface, StallGuard2, CoolStep and StealthChop	PRODUCTION	Smart Stepper Motors with Step/Direction	2-Phase Stepper	17	42	35	9V to 24V	1.2	TMCL	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop	256	41
PD42-2-1141	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB andRS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	17	42	35	9V to 28V	2	TMCL	GPIO, RS-485, Step/Dir, USB	Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	51
PD42-3-1070	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with S/D and UART interface, StallGuard2, CoolStep and StealthChop	PRODUCTION	Smart Stepper Motors with Step/Direction	2-Phase Stepper	17	42	49	9V to 24V	1.2	TMCL	Step/Dir, UART	-	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, StealthChop	256	51

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD42-3-1141	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor	2-Phase Stepper	17	42	40	9V to 28V	2	TMCL	GPIO, RS-485, Step/Dir, USB	Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	60
PD57-1-1160-CANOPEN	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	23	57	55	9V to 51V	2.8	CANopen	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	58
PD57-1-1160-TMCL	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	55	9V to 51V	2.8	TMCL	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	58
PD57-1-1161	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	55	10V to 30V	2.8	TMCL	RS-232, RS-485, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	58

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current RMS typ	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD57-2-1160-CANOPEN	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	23	57	101	9V to 51V	2.8	CANopen	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	71
PD57-2-1160-TMCL	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	101	9V to 51V	2.8	TMCL	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	71
PD57-2-1161	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	23	57	110	10V to 30V	2.8	TMCL	RS-232, RS-485, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	68
PD60-3-1160-CANOPEN	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	24	60	210	9V to 51V	2.8	CANopen	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	82

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD60-3-1160-TMCL	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	210	9V to 51V	2.8	TMCL	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	82
PD60-3-1161	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	210	10V to 30V	2.8	TMCL	RS-232, RS-485, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	82
PD60-4-1160-CANOPEN	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	24	60	310	9V to 51V	2.8	CANopen	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	103
PD60-4-1160-TMCL	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	310	9V to 51V	2.8	TMCL	CAN, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SpreadCycle, StallGuard2, Trapezoidal	256	-

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD60-4-1161	NEMA 23 smart stepper motor 9 to 51V, 55Ncm, 256 µSteps, with USB, S/D and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	24	60	310	10V to 30V	2.8	TMCL	RS-232, RS-485, USB	Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	103
PD28-1-1021-TMCL	Stepper Motor NEMA11 / 28mm 0.06 - 0.12Nm with Controller / Driver up-to 0.7A RMS / 24V DC sensOstep™ Encoder RS485 Interface	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	11	28	6	9V to 28V	1.4	TMCL	GPIO, RS-485, Step/Dir	Analog Hall	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	43
PD28-3-1021-TMCL	Stepper Motor NEMA11 / 28mm 0.06 - 0.12Nm with Controller / Driver up-to 0.7A RMS / 24V DC sensOstep™ Encoder RS485 Interface	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	11	28	12	9V to 28V	1.4	TMCL	GPIO, RS-485, Step/Dir	Analog Hall	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	62
PD42-1-1140-CANOPEN	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	22	9V to 28V	2	CANopen	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	46

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque ^{typ}	Supply Voltage Range	Phase Current RMS ^{typ}	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features ^{typ}	Microsteps ^{typ}	Length ^{typ}
PD42-1-1140-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	22	9V to 28V	2	TMCL	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	46
PD42-2-1140-CANOPEN	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	36	9V to 28V	2	CANopen	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	51
PD42-2-1140-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	36	9V to 28V	2	TMCL	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	51
PD42-3-1140-CANOPEN	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	44	9V to 28V	2	CANopen	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	60

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Supply Voltage Range	Phase Current typ RMS	Interface Protocol	Communication Interface	Feedback Interface	Motion Control Features typ	Microsteps typ	Length typ
PD42-3-1140-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	44	9V to 28V	2	TMCL	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	60
PD42-4-1140-CANOPEN	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	17	42	70	9V to 28V	2	CANopen	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	73
PD42-4-1140-TMCL	NEMA 17 smart stepper motor 9 to 28V, 22Ncm, 256 µSteps, with USB, CAN and RS485 interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	17	42	70	9V to 28V	2	TMCL	CAN, GPIO, RS-485, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	73
PD86-3-1180-CANopen	NEMA 34 smart stepper motor 12 to 54V, 7Nm, 256 µSteps, with RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and CANOpen	2-Phase Stepper	34	86	700	18V to 55V	5.5	CANopen	CAN, RS-232, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	118
PD86-3-1180-TMCL	NEMA 34 smart stepper motor 12 to 54V, 7Nm, 256 µSteps, with RS485 and CAN interface, SensOstep, StallGuard2 and CoolStep	PRODUCTION	cDriver Smart Stepper Motor with SensOstep and TMCL	2-Phase Stepper	34	86	700	18V to 55V	5.5	TMCL	CAN, RS-232, RS-485, Step/Dir, USB	A/B/N Incremental, Analog Hall, Reference / Stop Switch Input	CoolStep, MicroPlyer, SensOstep, SpreadCycle, StallGuard2, Trapezoidal	256	118

Precision Motors

Parts	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Torque typ	Phase Current RMS typ	Pole Count	Rated Speed typ	Motion Control Features typ	Width typ	Height typ	Length typ
QBL5704-116-04-042	NEMA 23 BLDC motor 32Ncm, 4 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor	BLDC	-	57	-	42	6.68	4	4000rpm	-	57	57	116
QBL5704-94-04-032	NEMA 23 BLDC motor 32Ncm, 4 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor	BLDC	-	57	-	32	5.08	4	4000rpm	-	57	57	94
QBL4208-100-04-025	NEMA 17 BLDC motor 6Ncm, 8 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor	BLDC	-	42	-	25	6.94	8	4000rpm	-	42	42	100
QBL4208-100-04-025-1K	NEMA 17 BLDC motor 6Ncm, 8 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor with Encoder	BLDC	-	42	-	25	7	8	4000rpm	Encoder	42	42	118
QBL4208-41-04-006	NEMA 17 BLDC motor 6Ncm, 8 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor	BLDC	-	42	-	6.25	1.78	8	4000rpm	-	42	42	41
QBL4208-61-04-013	NEMA 17 BLDC motor 6Ncm, 8 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor	BLDC	-	42	-	12.5	3.48	8	4000rpm	-	42	42	61
QBL4208-61-04-013-1K	NEMA 17 BLDC motor 6Ncm, 8 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor with Encoder	BLDC	-	42	-	13	3.5	8	4000rpm	Encoder	42	42	79
QBL4208-81-04-019	NEMA 17 BLDC motor 6Ncm, 8 poles, 4000RPM	RECOMMENDED FOR NEW DESIGNS	BLDC Motor	BLDC	-	42	-	18.5	5.14	8	4000rpm	-	42	42	81
QSH6018-45-28-110	NEMA 24 stepper motor 1.1Nm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	24	-	110	-	2.8	-	-	-	60	60	45
QSH6018-56-28-165	NEMA 24 stepper motor 1.1Nm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	24	-	165	-	2.8	-	-	-	60	60	56
QSH6018-65-28-210	NEMA 24 stepper motor 1.1Nm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	24	-	210	-	2.8	-	-	-	60	60	65

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque typ	Torque typ	Phase Current typ	Pole Count	Rated Speed typ	Motion Control Features typ	Width typ	Height typ	Length typ
QSH6018-65-28-210-10K	NEMA 24 stepper motor 1.1Nm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	24	-	210	-	2.8	-	-	Encoder	60	60	83
QSH6018-86-28-310	NEMA 24 stepper motor 1.1Nm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	24	-	310	-	2.8	-	-	-	60	60	86
QSH6018-86-28-310-10K	NEMA 24 stepper motor 1.1Nm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	24	-	310	-	2.8	-	-	Encoder	60	60	104
QSH6018-86-90-300-10K	NEMA 24 stepper motor 1.1Nm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	24	-	300	-	9	-	-	Encoder	60	60	104
QSH4218-35-10-027	NEMA 17 stepper motor 27Ncm, 1A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	17	-	27	-	1	-	-	-	42	42	35
QSH4218-35-10-027-10k	NEMA 17 stepper motor 27Ncm, 1A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	17	-	27	-	1	-	-	Encoder	42	42	53
QSH4218-41-10-035	NEMA 17 stepper motor 27Ncm, 1A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	17	-	35	-	1	-	-	-	42	42	41
QSH4218-47-28-040	NEMA 17 stepper motor 27Ncm, 1A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	17	-	40	-	2.8	-	-	-	42	42	47
QSH4218-51-10-049	NEMA 17 stepper motor 27Ncm, 1A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	17	-	49	-	1	-	-	-	42	42	51
QSH4218-51-10-049-10k	NEMA 17 stepper motor 27Ncm, 1A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	17	-	49	-	1	-	-	Encoder	42	42	69
QSH5718-41-28-055	NEMA 23 stepper motor 55Ncm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	23	-	55	-	2.8	-	-	-	57	57	41
QSH5718-51-28-101	NEMA 23 stepper motor 55Ncm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	23	-	101	-	2.8	-	-	-	57	57	51

	Description	Product Lifecycle	Primary Function	Motor Type	Flange NEMA	Flange	Holding Torque	typ	Torque	typ	Phase Current RMS	typ	Pole Count	Rated Speed	typ	Motion Control Features	typ	Width	typ	Height	typ	Length	typ
QSH5718-51-28-101-10K	NEMA 23 stepper motor 55Ncm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	23	-	101	-	2.8	-	-	-	Encoder	57	57	73							
QSH5718-56-28-126	NEMA 23 stepper motor 55Ncm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	23	-	126	-	2.8	-	-	-	-	57	57	56							
QSH5718-76-28-189	NEMA 23 stepper motor 55Ncm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	23	-	189	-	2.8	-	-	-	-	57	57	76							
QSH5718-76-28-189-10K	NEMA 23 stepper motor 55Ncm, 2.8A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	23	-	189	-	2.8	-	-	-	Encoder	57	57	98							
QSH2818-32-07-006	NEMA 11 stepper motor 6Ncm, 0.6A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	11	-	6	-	680m	-	-	-	-	28	28	32							
QSH2818-32-07-006-8k	NEMA 11 stepper motor 6Ncm, 0.6A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	11	-	6	-	680m	-	-	-	Encoder	28	28	47							
QSH2818-51-07-012	NEMA 11 stepper motor 6Ncm, 0.6A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	11	-	12	-	680m	-	-	-	-	28	28	51							
QSH2818-51-07-012-8k	NEMA 11 stepper motor 6Ncm, 0.6A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor with Encoder	Stepper Motor	11	-	12	-	680m	-	-	-	Encoder	28	28	66							
QSH8618-96-55-700	NEMA 34 stepper motor 7Nm, 5.5A	RECOMMENDED FOR NEW DESIGNS	Stepper Motor	Stepper Motor	34	-	700	-	5.5	-	-	-	-	86	86	96							

По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231
Ангарск (3955)60-70-56
Архангельск (8182)63-90-72
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Благовещенск (4162)22-76-07
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Владикавказ (8672)28-90-48
Владимир (4922)49-43-18
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89

Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Коломна (4966)23-41-49
Кострома (4942)77-07-48
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Курган (3522)50-90-47
Липецк (4742)52-20-81

Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Ноябрьск (3496)41-32-12
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Петрозаводск (8142)55-98-37
Псков (8112)59-10-37
Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Саранск (8342)22-96-24
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Сургут (3462)77-98-35
Сыктывкар (8212)25-95-17
Тамбов (4752)50-40-97
Тверь (4822)63-31-35

Тольятти (8482)63-91-07
Томск (3822)98-41-53
Тула (4872)33-79-87
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Улан-Удэ (3012)59-97-51
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Чебоксары (8352)28-53-07
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Чита (3022)38-34-83
Якутск (4112)23-90-97
Ярославль (4852)69-52-93

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

эл.почта: agu@nt-rt.ru || сайт: <https://analog.nt-rt.ru/>