Motor control

Product and tool selection guide

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ORDER CODE: SEMOTOR0503

8 and 16-bit standard microcontrollers

Universal DC motor, universal AC motor, single phase induction motor

		Part number	Program memory type					Prog. (bytes)	RAM (bytes)	Data E²PROM (bytes)	A/D inputs	Timer functions			Serial interface	LVD levels	I/Os (high current)[5]	Packages	Special features
			Flash	OTP	Fast ROM[1]	ROM	EPROM version					16-bit (IC/OC/ PWM)	8-bit (IC/OC/ PWM)	Others					
ST6 - General purpose control applications (up to 8KB address space)																			
8-bit ST6	16 pins	ST6200C		•	•	•[2]	•	1K	64		4x8-bit		1 (0/0/0)	WDG		1	9(3)	DIP16 SO16	RC oscillator, OSG, ROP, direct LED/triac driving
		ST6201C		•	•	•[2]	•	2K	64		4x8-bit		1 (0/0/0)	WDG		1	9(3)		
		ST6203C		•	•	•[2]	•	1K	64		–		1 (0/0/0)	WDG		1	9(3)		
		ST6252C		•	•	•[2]	•	2K	128		4x8-bit		1+1 (1/1/1)	WDG		1	9(5)		RC oscillator, OSG, auto-reload timer, ROP, direct LED/triac driving, IC/OC
		ST6262C		•	•	•[3]	•	2K	128	64	4x8-bit		1+1 (1/1/1)	WDG		1	9(5)		
	20 pins	ST6210C		•	•	•[2]	•	2K	64		8x8-bit		1 (0/0/0)	WDG		1	12(4)	DIP20 SO20	RC oscillator, OSG, ROP, direct LED/triac driving
		ST6220C		•	•	•[2]	•	4K	64		8x8-bit		1 (0/0/0)	WDG		1	12(4)		
		ST6260C		•	•	•[3]	•	4K	128	128	7x8-bit		1+1 (1/1/1)	WDG	SPI	1	13(6)		RC oscillator, OSG, auto-reload timer, ROP, direct LED/triac driving, IC/OC
	28 pins	ST6225C		•	•	•[2]	•	4K	64		16x8-bit		1 (0/0/0)	WDG		1	20(4)	DIP28 SO28	RC oscillator, OSG, ROP, direct LED/triac driving
		ST6265C		•	•	•[3]	•	4K	128	128	13x8-bit		1+1 (1/1/1)	WDG	SPI	1	21(8)		RC oscillator, OSG, auto-reload timer, ROP, direct LED/triac driving, IC/OC
ST7 - Industry standard, fast core architecture with innovative peripherals (up to 64KB address space)																			
ST7 lite																			
8-bit ST7	16-20 pins	ST7LITES2	•[7]		•			1K	128				2(1/1/1)[8]	WDG, RTC	SPI	3	13 (6)	DIP16/SO16	1% internal RC oscillator PLL, ROP, ICP, IAP
		ST7LITES5	•[7]		•			1K	128		5x8-bit		2(1/1/1)[8]	WDG, RTC	SPI	3	13 (6)	DIP16/SO16	1% internal RC oscillator PLL, ADC, ROP, ICP, IAP
		ST7LITE02	•[7]		•			1.5K	128				2(1/1/1)[8]	WDG, RTC	SPI	3	13 (6)	DIP16/SO16	1% internal RC oscillator PLL, ADC, ROP, ICP, IAP
		ST7LITE05	•[7]		•			1.5K	128		5x8-bit		2(1/1/1)[8]	WDG, RTC	SPI	3	13 (6)	DIP16/SO16	1% internal RC oscillator PLL, ADC with op-amp, ROP, ICP, IAP
		ST7LITE09	•[7]		•			1.5K	128	128	5x8-bit		2(1/1/1)[8]	WDG, RTC	SPI	3	13 (6)	DIP16/SO16	1% internal RC oscillator PLL, ADC with op-amp, ROP, ICP, IAP
		ST7LITE10	•[7]		•			4K	256		7x10-bit		2(2/1/4)[8]	WDG, RTC	SPI	3	15 (7)	DIP20/SO20	PLL, 32MHz timer, auto wake up from HALT, ADC with op-amp, ROP, ICP, IAP
		ST7LITE15	•[7]		•			4K	256		7x10-bit		2(2/1/4)[8]	WDG, RTC	SPI	3	15 (7)	DIP20/SO20	1% internal RC oscillator, PLL, 32MHz timer, auto wake up from HALT, ADC with op-amp, ROP, ICP, IAP
		ST7LITE19	•[7]		•			4K	256	128	7x10-bit		2(2/1/4)[8]	WDG, RTC	SPI	3	15 (7)	DIP20/SO20	1% internal RC oscillator, PLL, 32MHz timer, Auto Wake Up from HALT, ADC with op-amp, ROP, ICP, IAP
		ST7LITE20	•[7]		•			8K	384		7x10-bit		2(2/1/4)[8]	WDG, RTC	SPI	3	15 (7)	DIP20/SO20	PLL, 32MHz timer, auto wake up from HALT, ADC with op-amp, ROP, ICP, IAP
		ST7LITE25	•[7]		•			8K	384		7x10-bit		2(2/1/4)[8]	WDG, RTC	SPI	3	15 (7)	DIP20/SO20	1% internal RC oscillator, PLL, 32MHz timer, auto wake up from HALT, ADC with op-amp, ROP, ICP, IAP
		ST7LITE29	•[7]		•			8K	384	256	7x10-bit		2(2/1/4)[8]	WDG, RTC	SPI	3	15 (7)	DIP20/SO20	1% internal RC oscillator, PLL, 32MHz timer, auto wake up from HALT, ADC with op-amp, ROP, ICP, IAP
ST7 mid-range																			
8-bit ST7	32 pins	ST72324K2	•[6]		•	•		8K	384		8x10-bit	2 (3/3/1)		WDG, RTC	SPI/SCI	3	24(10)	SDIP32 TQFP32	ICP, IAP, nested interrupts, TLI, ROP, beep[4]
		ST72324K4	•[6]		•	•		16K	512		8x10-bit	2 (3/3/1)		WDG, RTC	SPI/SCI	3	24(10)		
		ST72324K6	•[6]		•	•		32K	1K		8x10-bit	2 (3/3/1)		WDG, RTC	SPI/SCI	3	24(10)		
	44 pins	ST72324J2	•[6]		•	•		8K	384		12x10-bit	2 (3/3/1)		WDG, RTC	SPI/SCI	3	32(12)	SDIP42 TQFP44	
		ST72324J4	•[6]		•	•		16K	512		12x10-bit	2 (3/3/1)		WDG, RTC	SPI/SCI	3	32(12)		
		ST72324J6	•[6]		•	•		32K	1K		12x10-bit	2 (3/3/1)		WDG, RTC	SPI/SCI	3	32(12)		
		ST72321J7	•[6]		•	•		48K	1.5K		12x10-bit	2 (3/3/2)	1 (0/4/4)	WDG, RTC	SPI/SCI/I²C	3	32(12)	TQFP44	
		ST72321J9	•[6]		•	•		60K	2K		12x10-bit	2 (3/3/2)	1 (0/4/4)	WDG, RTC	SPI/SCI/I²C	3	32(12)		
	64 pins	ST72321AR6	•[6]		•	•		32K	1K		16x10-bit	2 (4/4/2)	1 (2/4/4)	WDG, RTC	SPI/SCI/I²C	3	48(16)	TQFP64 (10x10)	
		ST72321R6	•[6]		•	•		32K	1K		16x10-bit	2 (4/4/2)	1 (2/4/4)	WDG, RTC	SPI/SCI/I²C	3	48(16)	TQFP64 (14x14)	
		ST72321AR7	•[6]		•	•		48K	1.5K		16x10-bit	2 (4/4/2)	1 (2/4/4)	WDG, RTC	SPI/SCI/I²C	3	48(16)	TQFP64 (10x10)	
		ST72321R7	•[6]		•	•		48K	1.5K		16x10-bit	2 (4/4/2)	1 (2/4/4)	WDG, RTC	SPI/SCI/I²C	3	48(16)	TQFP64 (14x14)	
		ST72321AR9	•[6]		•	•		60K	2K		16x10-bit	2 (4/4/2)	1 (2/4/4)	WDG, RTC	SPI/SCI/I²C	3	48(16)	TQFP64 (10x10)	
		ST72321R9	•[6]		•	•		60K	2K		16x10-bit	2 (4/4/2)	1 (2/4/4)	WDG, RTC	SPI/SCI/I²C	3	48(16)	TQFP64 (14x14)	
ST5 - Register file architecture, advanced mathematical capabilities, wide set of peripheral																			
ST5 - 408 OTP family																			
8-bit ST5	32-34 pins	ST52430		•	•			4-8K	256		8x8-Bit		3 (1/1/3)	WDG	SCI		23	SDIP32, SO34	Reset, NMI, divider, multiplier
	20-28 pins	ST52440		•	•			4-8K	256		4-6 ch by AC		2 (1/1/2)	WDG, triac driver			13-21	DIP20/28, SO20/28	4-6 ch AC with 16-bit timer, POR, BOD, NMI, divider, multiplier
ST5 - 508 FLASH family																			
8-bit ST5	16-36 pins	ST52F500	•		•			4-8K	512			2 (1/1/2)		WDG	SPI, I²C	3	10-14-22	DIP20, SDIP32, SO16/20/28	POR, 1% internal oscillator, ISP, IAP, NMI, divider, multiplier
		ST52F503	•		•			4-8K	512	256		2 (1/1/2)		WDG	SPI, I²C	3	10-14-22	DIP20, SDIP32, SO16/20/28	
		ST52F510	•		•			4-8K	512		2-6-8x10-Bit	2 (1/1/2)		WDG	SPI, I²C, SCI	3	10-14-22	DIP20, SDIP32, SO16/20/28	
		ST52F513	•		•			4-8K	512	256	2-6-8x10-Bit	2 (1/1/2)		WDG	SPI, I²C, SCI	3	10-14-22	DIP20, SDIP32, SO16/20/28, LFBGA36	
		ST52F514	•		•			4K	512	1-4K	6-8x10-Bit	2 (1/1/2)		WDG	SPI, I²C, SCI	3	14-22	DIP20, SDIP32, SO16/20/28	

Three phase brushless permanent magnet DC motor, induction motor and switched reluctance motor

		Part number	Program memory type					Prog. (bytes)	RAM (bytes)	Data E²PROM (bytes)	A/D inputs	Timer functions			Serial interface	LVD levels	I/Os (high current)[5]	Packages	Special features
			Flash	OTP	Fast ROM[1]	ROM	EPROM version					16-bit (IC/OC/ PWM)	8-bit (IC/OC/ PWM)	Others					
ST7- Industry standard, fast core architecture with innovative peripherals (up to 64K bytes address space)																			
8-bit ST7	32 pins	ST7MC1K2	•			-		8K	384		8x10-Bit	1 (2/2/1)	1 (1/0/1)	WWDG	LINSCI	1	17(3)	TQFP32	Motor Control peripheral, TC, ICD, ICP, IAP, LVD, CSS/PLL, ROP, RTC, nested interrupts, available in automotive range
	44 pins	ST7MC2S4	•			-		16K	768		11x10-Bit	2 (2/2/1)	1 (1/0/1)	WWDG	LINSCI, SPI	1	26(6)	TQFP44	
		ST7MC2S5	•			-		24K	768		11x10-Bit	2 (2/2/1)	1 (1/0/1)	WWDG	LINSCI, SPI	1	26(6)	TQFP44	
	56 pins	ST7MC2N6	•			-		32K	1024		14x10-Bit	2 (2/2/1)	1 (2/0/2)	WWDG	LINSCI, SPI	1	36(10)	SDIP56	Motor Control peripheral, ICD, ICP, IAP, LVD, CSS/PLL, ROP, RTC, nested interrupts
	64 pins	ST7MC2R6	•			-		32K	1024		16x10-Bit	2 (2/2/2)	1 (2/0/4)	WWDG	LINSCI, SPI	1	44(12)	TQFP64	
		ST7MC2R7	•			-		48K	1536		16x10-Bit	2 (2/2/2)	1 (2/0/4)	WWDG	LINSCI, SPI	1	44(12)	TQFP64	
	80 pins	ST7MC2M9	•			-		60K	1536		16x10-Bit	2 (2/2/2)	1 (2/0/4)	WWDG	LINSCI, SPI	1	60(12)	TQFP80	

ST10 - Fast core with advanced interrupt management (up to 10 Mbytes address space)

16-bit ST10	CAN	ST10R167-Qx					None	4K		16x10-Bit	5		WDG	USART/ SSC/CAN		111	PQFP144	ROMless, PEC, CAN, PWM, CAPCOM
		ST10F269Z2Qx	•				256K	12K		16x10-Bit	5		WDG	USART/ SSC/CAN		111		PEC, CAN, PWM, CAPCOM, MAC
		ST10F269Z1Qx	•				128K	12K		16x10-Bit	5		WDG	USART/ SSC/ CAN		111		
		ST10F269Z2Tx	•				256K	12K		16x10-Bit	5		WDG	USART/ SSC/CAN		111	TQFP144	

Abbreviations

ADC	:	Analog to digital converter
ART	:	Auto-reload timer
BLPD	:	Byte level protocol decoder
CAN	:	Controller area network
CAPCOM	:	Capture compare
DALI	:	Digital adressable lighting interface
DSC	:	Dual supply control
DTC	:	Data transfer coprocessor
IAP	:	In-application programming
IC/OC	:	Input capture/output compare
ICP	:	In-circuit programming
ISP	:	In-situ programming
IC	:	Inter-integrated circuit
LCD	:	Liquid crystal display
LIN	:	Local interconnect network
LVD	:	Low-voltage detection
MAC	:	Multiply accumulator
MC	:	Motor control
MFT	:	Multifunction timer
OSG	:	Oscillator safeguard
PEC	:	Peripheral event controller
PLL	:	Phase locked loop
PVR	:	Programmabille voltage regulator
PWM	:	Pulse width modulation
ROP	:	Readout protection
RTC	:	Real-time clock timer
SC	:	Smart card
SCI	:	Serial communication interface (UART)
SCR	:	Smart card reader
SPI	:	Serial peripheral interface
SSC	:	Single-cycle switching support
SSP	:	Synchronous serial port
TBU	:	Time base unit
UART	:	Universal asynchronous receiver transmitter
USART	:	Universal sync./async. receiver transmitter
USB	:	Universal serial bus
WDG	:	Watchdog timer
WWDG	:	Windows watchdog timer

Packages

DIP	:	Dual in line
LCC	:	Leaded chip carrier
PQFP	:	Plastic quad flat pack
SDIP	:	Shrink dual in line
SO	:	Small outline
SSOP	:	Shrink small outline package
TQFP	:	Thin quad flat pack

Notes

Under development

1. Factory advanced service technique ROM
2. Device exists in low-voltage version
3. Device exists in B version only (without LVD and OSG)
4. Audio square wave generator
5. Number of high-current pins included in the number of I/O pins
6. HDFlash (high density Flash)
7. XFlash (extended Flash)
8. Features include 8-bit timer plus 12-bit AR timer

For more information:

* ST microcontroller Website: www.st.com/mcu
* ST parametric search: www.st.com/psearch/index.htm
* ST microcontroller CD-ROM (contact your nearest Sales Office)

Application notes are available at: www.st.com/mcu

8 and 16-bit standard microcontroller development tools

Motor control demonstration kits/development tools

	MCU family	Target product	Target motor	Salestype	Description
ST	ST7	ST7MC	3-phase permanent magnet brushless DC/AC motor	ST7MC-KIT/BLDC	Demonstration, evaluation and development kit for ST7MC. Includes firmware, GUI, ST7MC samples, a 12VDC-240VAC 1000W inverter board, isolation board, STXF-INDART/USB low-cost debugger/ programmer and 24V BLDC motor. Available at ST/distributor or www.softecmicro.com
	ST7	ST7MC		ST7MC-MOT/IND	240V/800W Selni three-phase induction motor for use with the ST7MC-KIT using induction motor default values (for evaluation purposes). Available at ST/distributor or www.softecmicro.com
	ST5	ST52T440/T400	Universal and single phase asynchronous induction motor	ST52MC3/KIT	Demonstration kit to run motor through a triac based topology and Viper 12 (with ST52 DIP28) The kit includes a control board and all components to be mounted
	ST5	ST52T440/T400		ST52MC4/KIT	Demonstration kit to run motor, through a triac based topology and a low-cost power supply (with ST52 DIP20). The kit includes a control board and all components to be mounted

Software tools

	MCU family	C toolchain	Specific tools	Real time kernel	IDE/debugger	App. builder
ST	ST6		STREALIZER-II			
	ST7				STVD7	
	ST9	STVD9			STVD9	
	ST5			VISUAL 5 - FSASM - AFM		
Third-party	ST5	Raisonance			Raisonance	
	ST6	Raisonance	Actum (graphic programming) Advanced Micro Tools (codesign tool)		Raisonance	
	ST7	Metrowerks Cosmic	Actum (graphic programming) RistanCase (CASE Tool) Vector Informatik (OSEK)	CMX Segger	Cosmic Hitex Isystem Metrowerks Raisonance[1]	Raisonance[1]
	ST10	Keil Tasking High Tec	RistanceCase Vector Informatik	CMX Windrever	Blue river software Hitex ilogix Lauterbach Pls development tools	

Notes
1. Contact Raisonance for availability

ST6 hardware development tools

Part number		Evaluation board Starter kit	Emulator		Dedicated board	Programmer	
			ST emulator	3rd party		Single programmer	3rd party
28 pins	ST6200C	ST622XC-KIT[1]	ST62GP-EMU2[5]	Ceibo[6] Softec Microsystem[6]	ST62GP-DBE	ST62E2XC-EPB[3]	Advantech Equipment BP Microsystems Conitec Data I/O Dataman EE Tools Elnec Hi-Lo Systems Ice Technology Leap Lloyd Research Logical Devices MQP Electronics Needham's Electronics Phyton Rk-System Softec Microsystems STAG Programmers System General Tribal Microsystems Xeltek
	ST6201C						
	ST6203C						
	ST6252C	ST626XC-KIT[2]				ST62E6XC-EPB[2]	
	ST6262C						
20 pins	ST6210C	ST622XC-KIT[1]				ST62E2XC-EPB[3]	
	ST6220C						
	ST6260C	ST622XC-KIT[2]				ST62E6XC-EPB[2]	
28-42 pins	ST6225C	ST622XC-KIT[1] ST62-DEMOSAFE[1 4]				ST62E2XC-EPB[3]	
	ST6265C	ST622XC-KIT[2]				ST62E6XC-EPB[2]	

Notes
1. Add suffix /110 /220 or /UK for the power supply for your region
2. Add suffix /EU /US or /UK for the power supply for your region
3. Add suffix /110 or /220 for the power supply for your region
4. Board for demonstrating the robustness of the ST6 in a noisy environment
5. Emulators interface with Raisonance's IDE (RIDE)

ST5 hardware development tools

Part number		Evaluation board	In-circuit debugging	Development kit	3rd party multiple programmer
OTP	ST52T430	ST52X430LC/KIT	STXF-INDART/USB ST5F5XX-IND/USB[1]	ST52X430/KIT	BP Microsystem Softec Microsystem
	ST52T440	ST52X440LC/KIT			
FLASH	ST52F500				
	ST52F503				
	ST52F510				
	ST52F513				
	ST52F514				

8 and 16-bit standard microcontroller development tools

ST7 hardware development tools

Part number		Evaluation board starter kit	In-circuit debugging[4]	Emulator			Active probe and T.E.B for emulator		Programmer	
				DVP series[4]	EMU series[4]	3rd party	DVP series	EMU series	Single programmer	3rd party programmer
ST7 LITE	ST7LITES ST7LITE0		STXF-INDART/USB	ST7MDT10-DVP3[6]	ST7MDT10-EMU3		ST7MDT10-TEB/DVP	ST7MDT10-TEB	ST7MDT10-EPB[2] ST7-STICK	BP Microsystems Data I/O Dataman Elnec HI-LO Leap RK-System Segger Softec Microsystem System General Xeltec
	ST7LITE1 ST7LITE2	ST7FLIT2-COS/COM								
ST7 MDRANGE	ST72324	ST7MDT20-EVC[1] ST7MDT20-EVY[1]		ST7MDT20-DVP3[5]	ST7MDT20J-EMU3	Hitex Isystem	ST7MDT20-TEB/DVP	ST7MDT20J-TEB	ST7MDT20J-EPB[2] ST7-STICK	
	ST72321 (44 pins)									
	ST72321 (64 and 80 pins)				ST7MDT20M-EMU3			ST7MDT20M-TEB	ST7MDT20M-EPB[2] ST7-STICK	
MC	ST7MC	ST7MC-KIT/BLDC[3]			ST7MDT50-EMU3			ST7MDT50-TEB	ST7-STICK	

Notes:
1 Add suffix /EU, /US or /UK for the power supply for your region
2 Add suffix /EU or /US for the power supply for your region
3 Available from ST or from Softec www.softecmicro.com
4 Debugging tools interface with STVD7 (ST IDE)
5 Include only sockets for SDIP32/SDIP42. Contact sales office for order information of other sockets/adapters
6 Include only sockets for DIP16/SO16. Contact sales office for order information of other sockets/adapters

Power discretes

Part number	Description	IT (RMS) (A)	Electrical parameters			Packages
			Vrrm, Vdrm (V)	Vtm (V) @ Itm (A)	Igt (mA)	
	Universal motor					
	AC switches					
ACS120-7ST	ACS switch	2	700	1.3 @ 2.8	10	TO-220AB
ACST4-7SB/FP	ACST switch	4	700	1.5 @ 5.6	10	DPAK/TO-220FPAB
ACST6-7ST/G		6	700	1.4 @ 2.1	10	TO-220AB/D^{2}PAK
ACST8-8CFP/CG		8	800	1.5 @ 11	30	TO-220FPAB/D^{2}PAK
	Triacs					
BTB08-600SW	Logic level triac	8	600	1.55 @ 11	10	TO-220AB
BTB08-600CW	Snubberless triac	8	600	1.55 @ 11	35	
BTB12-600CW		12	600	1.55 @ 17	35	
BTB16-600CW		16	600	1.55 @ 22.5	35	

BTB24-600CW		25	600	1.55 @ 35	35	
BTB26-600BW		25	600	1.55 @ 35	50	TOP3
T1235-600G		12	600	1.55 @ 17	35	
T1635-600G	High-performance module	16	600	1.55 @ 22.5	35	D^2PAK
T2535-600G		25	600	1.55 @ 35	35	
MSS50-800	Back to back thyristor module	50	800	1.7 @ 100	50	ISOTOP
			Thyristors (SCRs)			
TS420-600B/H		4	600	1.6 @ 8	0.2	
TS820-600B/H	Sensitive SCR	8	600	1.6 @ 16	0.2	DPAK/IPAK
TS1220-600B/H		12	600	1.6 @ 24	0.2	

Part number	Description	VBO (nom) (V)	Electrical parameters			Packages
			Vbo min (V)	Vbo max (V)	Ibo max (µA)	
			DIACs			
SMDB3	Surface mount device DIAC	32	28	36	10	SOT-23
DB3	DIAC	32	28	36	50	DO-35

Part number	Description	IT (RMS) (A)	Electrical parameters			Packages
			Vrrm, Vdrm (V)	Vtm (V) @ Itm (A)	Igt (mA)	
			Single phase induction motor			
			AC switches			
ACS102-5TA/T1		0.2	500	1.1 @ 0.3	5	TO-92/SO-8
ACS302-5T3		0.2	500	1.2 @ 0.3	5	SO-20
ACS108-5SA/SN	ACS switch	0.8	500	1.3 @ 1.1	10	TO-92/SOT-223
ACS110-7SB2/N		1	700	1.3 @ 1.4	10	DIP-8/SOT-223
ACS120-7ST		2	700	1.3 @ 2.8	10	TO-220AB
ACST4-7SB/FP		4	700	1.5 @ 5.6	10	DPAK/TO-220FPAB
ACST6-7ST/G	ACST switch	6	700	1.4 @ 2.1	10	TO-220AB/D^2PAK
ACST8-8CFP/CG		8	800	1.5 @ 11	30	TO-220FPAB/D^2PAK
			Triacs			
BTB08-600SW	Logic level triac	8	600	1.55 @ 11	10	TO-220AB
BTB08-600CW		8	600	1.55 @ 11	35	TO-220AB
BTB12-600CW		12	600	1.55 @ 17	35	TO-220AB
BTB16-600CW	Snubberless triac	16	600	1.55 @ 22.5	35	TO-220AB
BTB24-600CW		25	600	1.55 @ 35	35	TO-220AB
BTB26-600BW		25	600	1.55 @ 35	50	TOP3
T1235-600G		12	600	1.55 @ 17	35	D^2PAK
T1635-600G	High-performance module	16	600	1.55 @ 22.5	35	D^2PAK
T2535-600G		25	600	1.55 @ 35	35	D^2PAK

Part number	Description	Electrical parameters					Packages
		Ptot (W)	ZVS	Actuators	Security	Protection	
Control part							
STCC02	Application specific discrete	0.6	Yes	3	1	IEC61000-4-4	DIP-16

Part number	Description	IT (RMS) (A)	Electrical parameters			Packages
			Vrrm, Vdrm (V)	Vtm (V) @ Itm (A)	Igt (mA)	
Permanent magnet synchronous motor						
AC switches						
ACS102-5TA/T1	ACS switch	0.2	500	1.1 @ 0.3	5	TO-92/SO-8
ACS302-5T3		0.2	500	1.2 @ 0.3	5	SO-20
ACS108-5SA/SN		0.8	500	1.3 @ 1.1	10	TO-92/SOT-223

Part number	Description	IF (av) (A)	Electrical parameters			Packages
			Vrm (V)	Vf (V) @ If (A)	trr max (ns) 50A/µs	
3 phase motor						
Ultrafast diodes						
STTH3R06	600V Turbo 2	3	600	1.25 @ 3	30	DO-201AD
STTH5R06D		5	600	1.8 @ 5	40	TO-220AC
STTH8R06D		8	600	1.8 @ 8	45	TO-220AC
STTH803D	300V	8	300	1 @ 8	35	TO-220AC

Part number	Description	IT (RMS) (A)	Electrical parameters			Packages
			Vrrm, Vdrm (V)	Vtm (V) @ Itm (A)	Igt (mA)	
Multiple winding induction motor (fans)						
Triacs						
ZOO607MA	Standard triac	0.8	600	1.5 @ 1.1	7	TO-92

Part number	Description	IF (av) (A)	Electrical parameters			Packages
			Vrm (V)	Vf (V) @ If (A)	trr max (ns) 50A/µs	
Stepper motor/switch reluc motor						
Ultrafast diodes						
STTH1L06	600V Turbo 2	1	600	1.05 @ 1	80	DO-41

Part number	Description	Application highlights	Electrical parameters				Packages
			BV_{CES} (V)	I_C (A)	$V_{CE(SAT)}$ (V) typ	t_{FALL} (ns)	
IGBT							
Ultrafast diodes							
STGD7NB60ST4	PowerMESH standard-speed IGBTs	Switched reluctance motor drive	600	7	1.20	1200	DPAK
STGP10NB60S			600	10	1.35	1200	TO-220
STGF10NB60SD			600	10	1.35	1200	TO-220FP
STGF20NB60S			600	13	1.25	800	TO-220FP
STGD3NB60HDT4	PowerMESH high-speed IGBTs	Medium frequency motor drive (compressor, pump, appliances), zero current switching resonant converter (induction cooking and heating).	600	6	2.40	77	DPAK
STGP3NB60HD			600	6	2.40	77	TO-220
STGB7NB60HDT4			600	7	2.30	70	D^2PAK
STGP7NB60HDFP			600	7	2.30	70	TO-220
STGP12NB60HD			600	18	2.00	100	TO-220
STGB7NC60HDT4			600	15	1.60	100	D^2PAK
STGP7NC60HD		Medium frequency motor drive (compressor, pump, appliances), zero current switching resonant converter (induction cooking and heating).	600	15	1.60	100	TO-220
STGF7NC60HD			600	15	1.60	100	TO-220FP
STGP3NB60KD	PowerMESH high-speed short circuit protected IGBTs		600	6	2.30	100	TO-220
STGP3NB60KDFP			600	6	2.30	100	TO-220FP
STGD7NB60KT4			600	7	2.30	100	DPAK
STGP7NB60KD			600	7	2.30	100	TO-220
STGB12NB60KDT4			600	18	2.20	100	D^2PAK
STGP12NB60KD			600	18	2.20	100	TO-220
STGP20NC60V	PowerMESH hyper fast IGBTs	High frequency motor drive (industrial and silent applications), power factor corrector for motor drive, zero voltage switching resonant converter (induction cooking and heating).	600	30	1.90	70	TO-220
STGW20NC60VD			600	30	1.90	70	TO-247
STGW40NC60V			600	50	1.90	70	TO-247
STGY40NC60V			600	50	1.90	70	Max247

Part number	Description	Application highlights	Electrical parameters			Packages
			BV_{DSS} (V)	I_D (A)	R_{DSON} max @ 10V (Ω)	
Power mosfet						
STT3PF30L	P-channel mosfet	Transistor for high frequency inverter drive	-30	3	0.165	SOT23-6L
STT4NF30L	N-channel mosfet		30	4	0.065	SOT23-6L
STD10PF06T4	P-channel mosfet		-60	10	0.200	DPAK
STD12NF06T4	N-channel mosfet		60	12	0.100	DPAK
STS4DPF30L	Dual P-channel mosfet		-30	4	0.080	SO-8

Part number	Description	Application highlights	Electrical parameters			Packages
			BV_{DSS} (V)	I_D (A)	R_{DSON} max @ 10V (Ω)	
Power mosfet						
SSTS2DNF30L	Dual N-channel mosfet	Transistor for high frequency inverter drive	30	3	0.011	SO-8
STS3DNF30L			30	3.5	0.065	SO-8
STS7C4F30L	Complementary pair mosfet		-30/30	7	0.022 / 0.08	SO-8
STS3C2F10			-100/100	3	0.430 / 0.145	SO-8
STP80NF03L-04	N-channel mosfet	Transistor for DC motor drive	30	80	0.004	TO-220
STD40NF3LLT4			30	40	0.011	DPAK
STD60NF3LLT4			30	60	0.010	DPAK
STP85NF55			55	80	0.008	TO-220
STP150NF55			55	120	0.006	TO-220
STP36NF06			60	30	0.040	TO-220
STP45NF06			60	38	0.028	TO-220
STP55NF06			60	55	0.018	TO-220
STP60NF06L			60	60	0.014	TO-220
STP60NF06			60	60	0.016	TO-220
STP75NF75			75	75	0.011	TO-220
STP140NF75			75	120	0.080	TO-220
STP40NF10			100	40	0.028	TO-220
STP80NF10			100	80	0.015	TO-220
STP80NS04Z	Double zener protected mosfet		Clamped	80	0.009	TO-220
STP60NS04Z			Clamped	60	0.015	TO-220
STP62NS04Z			Clamped	62	0.015	TO-220
STD4NS25T4	N-channel mesh overlay mosfet	Transistor for high frequency inverter drive	250	4	1.10	DPAK
STP16NS25			250	16	0.28	TO-220
STP12NM50	MDmesh mosfet	High frequency transistor with fast body diode for inverter drive	500	12	0.35	TO-220
STD5NM50T4			500	7.5	0.80	DPAK
STW45NM50FD	FDmesh mosfet		500	45	0.10	TO-247
STW20NM50FD			500	20	0.25	TO-247
STP20NM50FD			500	20	0.25	TO-220
STW14NM50FD			500	14	0.40	TO-220
STP12NM50FD			500	12	0.40	TO-220
STP20NM60FD			600	20	0.29	TO-220
STP11NM60FD			600	11	0.45	TO-220
STP9NK60ZD	SuperFREDmesh mosfet		600	6.4	0.95	TO-220
STW29NK50ZD			500	29	0.16	TO-247

Part number	Description	Application highlights	Power (W)	Electrical parameters				Packages
				Vrm (V)	If(av) (A)	Vf (V) @ If (A)	trr max (ns) 50A/µs	
Ultrafast rectifier								
STTH5R06D	600V Turbo 2	Power factor correction boost diode	500	600	5	1.8 @ 5	40	TO-220AC

STTH15R06D			1000	600	15	1.8 @ 15	40	TO-220AC
STTH8R06D			800	600	8	1.8 @ 8	45	TO-220AC
STTH8R06FP			800	600	8	1.8 @ 8	45	TO-220FPAC
STTH8L06D	600V Turboswitch	Free wheel for PWM motor drive	800	600	8	1.05 @ 8	105	TO-220AC
STTH8L06FP			800	600	8	1.05 @ 8	105	TO-220FPAC
STTH30R06CW			3000	600	2 x 15	1.8 @ 15	50	TO-247

Part number	Description	Application highlights	Power (W)	Electrical parameters				Packages
				Vrm (V)	If(av) (A)	Vf (V) @ If (A)	Ifsm (A)	
Rectifier bridge								
BF3510TV	600V Turbo	Front-end AC-DC controlled rectification	1500	1000	35	1.3 @ 35	300	ISOTOP
MDS35-800	Controlled rectifier half bridge		2000	800	80	1.7 @ 80	400	ISOTOP
MDS80-800			3000	800	170	1.7 @ 170	700	ISOTOP

Part number	Description	Application highlights	Power (W)	Electrical parameters				Packages
				Vrm (V)	Vbr(V) @ 1mA	Vcl (V) @ 1pp (A)	Power (W)	
Transient voltage suppressor								
SMBJ15A-TR	600W Transil™ diode	Low-voltage DC front-end or switch protection	Any	15	16.7	24.4 @ 25.1	600	SMB
SMBJ28A-TR				28	31.1	45.4 @ 13.8	600	SMB
SMBJ48A-TR				48	53.3	77.4 @ 8.1	600	SMB
SMBJ58A-TR				58	64.4	93.6 @ 6.7	600	SMB
SMBJ188A-TR				188	209	328 @ 2	600	SMB
SMCJ15A-TR	1500W Transil™ diode			15	16.7	24.4 @ 64	1500	SMC
SMCJ188A-TR				188	209	328 @ 4.6	1500	SMC
BZW06-376B	600W Transil™ diode	High-voltage DC front-end or Triac protection		376	418	603 @ 1.3	600	F126

Part number	Description	Application highlights	Electrical parameters			Packages
			BVdss (A)	Id (A)	Total Rdson (O.)	
VIPower						
VND670SP	Double H.S.D. + 2 MOSFET drivers	Complete H-bridge for DC motor	40	15	0.03	PowerSO-10
VN770K	Double H.S.D. + 2 OMNIFETs		41	9	0.22	SO-28
VN771K			41	9	0.095	SO-28
VN772K			41	9	0.12	SO-28
VNH2SP30			41	30	0.019	MultiPowerSO-30
VNH3SP30			40	30	0.045	MultiPowerSO-30
VIPer12AS/ADIP	Offline SMPS smart switcher	Power supply for motor control	730	0.32	30	SO-8/DIP8
VIPer22AS/ADIP			730	0.56	17	SO-8/DIP8

Application notes are available at: www.st.com

Smart power and dedicated ICs

Part number	Description	# outputs	VRAIL (V)	VSUP (V)	IOUT (A)	Bootstrap diodes	Rise/fall time with inf load	Other features	Packages
IGBT/MOSFET driver									
L6384	HV half bridge driver	1H+1L	600	12.5-16.6*	0.4/0.65	•	70/30nsec	Dead time setting, shut down, internal zener diode	Minidip/SO8
L6385	HV high and low side driver	1H+1L	600	10.1-17.0	0.4/0.65	•	50/30nsec	Independent high and low side driver	Minidip/SO8
L6386	HV high and low side driver	1H+1L	600	12.5-17.0	0.4/0.65	•	50/30nsec	Shut down input, sense comparator	DIP14/SO14
L6387	HV high and low side driver	1H+1L	600	6.5-17.0	0.4/0.65	•	50/30nsec	High side/low side Inter-locking function	Minidip/SO8
L9380	Triple high low side driver	3H		7-18.5				Constant gate charge/discharge current, progr. overload protection	SO20
L9903	Full bridge driver	2H+2L		6-20	0.05			Progr. cross conduction protection time, ISO9141 Interface	SO20
TD300I	Triple low side driver	3L		13-16	0.6			TTL Inputs	DIP14/SO14
TD310I	Triple low side driver	3L		4-16	0.6			TTL Inputs + stand by	DIP16/SO16
TD340	Low-voltage full bridge driver	2H+2L		6.5-20	0.05/0.1			1.5MS dead time 5V serial regulator reset and watchdig circuit	SO20

Part number	Description	# motor windings	VSUP (V)	IQ (mA)	Output signals	Other features	Packages
Unipolar stepper motor							
Controllers							
L297	Stepper motor controller	4	6	50	TTL	F/H step, constant frequency switchmode	DIP20/SO20
L6506	Motor current controller	4	6	25	TTL	Constant frequency switchmode	DIP18/SO20

Part number	Description	# motor windings	VRAIL (V)	VSUP (V)	IOUT (A)	Internal diodes	VSAT or RDSON	Other features	Packages
Power stage									
L603C/4C	Eight darlington array	8	70	70	0.4	•	2 V	Common emitter, open collector	DIP18/SO20
L6220	Quad darling array	4	46	5	1.8	•	1.6 V	2 inverting + 2 non-inverting inputs	PowerDIP16
L6221AD/AS	Quad darling array	4	46	5	1.8	•	1.6 V	4 non-inverting inputs	SO20/DIP16
L6221N	Quad darling array	4	60	5	1.8	•	1.85 V	4 non-inverting inputs	Multiwatt15
L6221CD	Quad darling array	4	60	5	1.2	•	1.85 V	4 non-inverting inputs	SO20
L702B/N	Quad darling array	4	70	70	2		1.3 V	4 non-inverting inputs	SO20/DIP16/DIP16
ULN200xA/xD1	Seven darling array	7	50	50	0.5	•	1.6 V	Common emitter, open collector	DIP16/SO16
ULN206xB	Quad darling array	4	35-50	35-50	1.5	•	1.4 V	Common emitter, common/open collector	PowerDIP16
ULN207xB	Quad darling array	4	35-50	35-50	1.5	•	1.4 V	Common emitter, common/open collector	PowerDIP16
UNL280xA	Eight darling array	8	50	50	0.5	•	1.6 V	Common emitter, open collector	DIP18
ULQ200xA/xD1	Seven darling array	7	50	50	0.5	•	1.4 V	As ULN200xA/xD1 but extended temperature	DIP16/SO16
ULQ280xA	Seven darling array	8	50	50	0.5	•	1.6 V	As ULN280xA but extended temperature	DIP18

Part number	Description	# motor windings	VSUP (V)	IQ (mA)	Output signals	Other features	Packages
Bipolar stepper motor							
Controllers							
L297	Stepper motor controller	2	6	50	TTL	F/H step, constant frequency switchmode	DIP20/SO20
L6506	Motor current controller	2	6	25	TTL	Constant frequency switchmode	DIP18/SO20

Part number	Description	# motor windings	VRAIL (V)	VSUP (V)	IOUT (A)	Internal diodes	VSAT or RDSON	Other features	Packages
Power stages									
L293B/E	Quad half-bridge	2	36	36	1		1.2/1.4V	Inhibit function	DIP16/PDIP20
L293D/DD	Quad half-bridge	2	36	36	0.6	•	1.2/1.4V	Inhibit function	SO20/PDIP16
L298	Dual full-bridge	2	46	5	2		1.7/2V	Inhibit function	MW15H/MW15/SO20
L6201	Full-bridge	1	48	48	1/4	•	0.3 Ohm	Internal logic supply, cross-conduction protection	SO20/PowerSO20
L6202	Full-bridge	1	48	48	1.5	•	0.3 Ohm	Internal logic supply, cross-conduction protection	PowerDIP18
L6203	Full-bridge	1	48	48	4	•	0.3 Ohm	Internal logic supply, cross-conduction protection	Multiwatt11
L6204	Dual-full-bridge	2	48	48	0.5	•	1.2 Ohm	Internal logic supply, cross-conduction protection	PowerDIP20/SO28
L6225	DMOS dual-full-bridge driver	2	52	52	1.4	•	0.65 Ohm	Fixed overcurrent protection	PDIP20/SO20/PowerSO20
L6226	DMOS dual-full-bridge driver	2	52	52	1.4	•	0.65 Ohm	Programmable overcurrent protection	PDIP24/SO24/PowerSO36
L6227	Dual-full-bridge driver with PWM controller	2	52	52	1.4	•	0.65 Ohm	Fixed overcurrent protection, constant TOFF switchmode	PDIP24/SO24/PowerSO36
L6205	DMOS dual-full-bridge driver	2	52	52	2.8	•	0.3 Ohm	Fixed overcurrent protection	PDIP20/SO20/PowerSO20
L6206	DMOS dual-full-bridge driver	2	52	52	2.8	•	0.3 Ohm	Programmable overcurrent protection	PDIP24/SO24/PowerSO36
L6207	Dual-full-bridge driver with PWM controller	2	52	52	2.8	•	0.3 Ohm	Fixed overcurrent protection, constant TOFF switchmode	PDIP24/SO24/PowerSO36
Motor drivers									
L6228	DMOS driver for bipolar stepper motor	2	52	52	2.8	•	0.65 Ohm	Fixed overcurrent protection, constant TOFF switchmode, F/H step, fast/slow decay	PDIP24/SO24/PowerSO36
L6208	DMOS driver for bipolar stepper motor	2	52	52	2.8	•	0.3 Ohm	Fixed overcurrent protection, constant TOFF switchmode, F/H step, fast/slow decay	PDIP24/SO24/PowerSO36
L6219	Bipolar stepper motor driver	2	46	5	0.75	•	1/1.6V	F/H/Q step, constant TOFF switchmode	PDIP24
L6219DS/DSA	Bipolar stepper motor driver	2	46	5	0.75	•	1/1.6V	F/H/Q step, constant TOFF switchmode	SO24
L6258E	Bipolar stepper motor driver	2	40	5	1.2	•	0.6 Ohm	F/H/micro step, constant frequency switchmode	PowerSO36
L6258EX	Bipolar stepper motor driver	2	40	5	1.5	•	0.6 Ohm	F/H/micro step, constant frequency switchmode	PowerSO36
L9925	Bipolar stepper motor driver	2	24	24	0.5	•	0.8 Ohm	Short-circuit protection	SO28
L9930	Bipolar stepper motor driver	2	24	24	0.5	•	2 Ohm	Fixed overcurrent protection, constant TOFF switchmode, F/H step, fast/slow decay	Multiwatt11/SO20Power
L9935	Bipolar stepper motor driver	2	24	5	1.2	•	0.7 Ohm	Short-circuit and overload/open-load protection, SPI	
PBL3717A	Bipolar stepper motor driver	1	46	5	1	•	1.7/2.1V	F/H/Q step, constant TOFF switchmode	PowerDIP16
TEA3717DP	Bipolar stepper motor driver	1	40	5	1	•	1.7/2.3V	F/H/Q step, constant TOFF switchmode	PowerDIP16
TEA3718DP/SDP	Bipolar stepper motor driver	1	50	5	1.2	•	1.2/1.3V	F/H/Q step, constant TOFF switchmode	PowerDIP16
TEA3718FPT/SFP	Bipolar stepper motor driver	1	50	5	1.2	•	1.2/1.5V	F/H/Q step, constant TOFF switchmode	SO20
TEA3718SP	Bipolar stepper motor driver	1	50	5	1.2	•	1.2/1.5V	F/H/Q step, constant TOFF switchmode	Multiwatt15

Smart power and dedicated ICs

Part number	Description	# motors	VSUP (V)	IQ (mA)	Output signals	Other features	Packages
Brush DC motor							
Controller							
L6506	Motor current controller	1	6	25	TTL	Constant frequency switchmode	DIP18/SO20

Part number	Description	# motors	VRAIL (V)	VSUP (V)	IOUT (A)	Internal diodes	VSAT or RDSON	Other features	Packages
Power stage									
L149	Power operational amplifier	1	±20	±20	3		3.5 V	G-B product: 200 kHz, cross-conduction protection	Pentawatt
L272	Dual power operational amplifier	1 or 2	28	28	1		1.5 V	G-B product: 350 kHz	SO16/Minidip/PDIP16
L2720	Dual power operational amplifier	1 or 2	28	28	1	•	1/1.5 V	G-B product: 1.2 MHz	PowerDIP16
L2722	Dual power operational amplifier	1 or 2	28	28	1	•	1/1.5 V	G-B product: 1.2 MHz	Minidip
L2724	Dual power operational amplifier	1 or 2	28	28	1	•	1/1.5 V	G-B product: 1.2 MHz	SIP9
L2726	Dual power operational amplifier	1 or 2	28	28	1	•	1/1.5 V	G-B product: 1.2 MHz	SO20
L293B/D/DD/E	Quad half-bridge	2	36	36	1		1.2/1.4 V	Inhibit function	PDIP16/DIP16/SO20/DIP20
L298	Dual full-bridge	2	46	5	2		1.7/2 V	Inhibit function	MW15H/MW15/SO20
L6201	Full-bridge	1	48	48	1/4	•	0.3 Ohm	Internal logic supply, cross-conduction protection	SO20/PowerSO20
L6202	Full-bridge	1	48	48	1.5	•	0.3 Ohm	Internal logic supply, cross-conduction protection	PowerDIP18
L6203	Full-bridge	1	48	48	4	•	0.3 Ohm	Internal logic supply, cross-conduction protection	Multiwatt11
L6204	Dual full-bridge	2	48	48	0.5	•	1.2 Ohm	Internal logic supply, cross-conduction protection	PowerDIP20/SO28
L6225	DMOS dual full-bridge driver	2	52	52	1.4	•	0.65 Ohm	Fixed overcurrent protection	PDIP20/SO20/PowerSO20
L6226	DMOS dual full-bridge driver	2	52	52	1.4	•	0.65 Ohm	Programmable overcurrent protection	PDIP24/SO24/PowerSO36
L6227	Dual full-bridge driver with PWM controller	2	52	52	1.4	•	0.65 Ohm	Fixed overcurrent protection, constant TOFF switchmode	PDIP24/SO24/PowerSO36
L6205	DMOS dual-full-bridge driver	2	52	52	2.8	•	0.3 Ohm	Fixed overcurrent protection	PDIP20/SO20/PowerSO20
L6206	DMOS dual-full-bridge driver	2	52	52	2.8	•	0.3 Ohm	Programmable overcurrent protection	PDIP24/SO24/PowerSO36
L6207	Dual full-bridge driver with PWM controller	2	52	52	2.8	•	0.3 Ohm	Fixed overcurrent protection, constant TOFF switchmode	PDIP24/SO24/PowerSO36
Motor drivers									
L292	DC motor driver	1	36	36	2		2 V	Switchmode	Multiwatt15
L9947	DC motor driver	3	16	5	0.5/3	•	0.25/2.5 Ohm	Microcontroller bidirectionaal bus, one motor at a time	MW15/MW15 in line
L9997ND	DC motor driver	1	16	16	1.2	•	0.83 Ohm	Overload/open-load protection	SO20
TDA7274	DC motor driver	1	6	6	0.7	•		Linear, speed closed loop, short circuit protection	Minidip
L9903	DC motor driver	1	40	16	20		Not appl.	Pre-driver	SO20
L9909	DC motor driver	1	40	16	0.3	•	2 Ohm	Load dump protection/25KV ESD	Minidip/SO20

Part number	Description	# motors	VSUP (V)	IOUT (mA)	Output signals	Other features	Packages
Brushless DC motor							
Controllers							
L8150	Three-phase brushless motor pre-driver	1	20	2.5	CMOS level	Smooth drive concept, hall effect logic	SO28

Part number	Description	# motors	VRAIL (V)	VSUP (V)	IOUT (A)	Internal diodes	VSAT or RDSON	Other features	Packages
Power stages									
L6234	Three-phase bridge	1	52	52	2.8/4	•	0.3 Ohm	Cross-conduction protection	PDIP20/PowerSO20
Motor drivers									
L6229	Three-phase brushless DC motor driver	1	52	52	1.4	•	0.65 Ohm	Fixed overcurrent protection, hall effect logic, constant TOFF switchmode, brake function	PDIP24/SO24/PowerSO36
L6235	Three-phase brushless DC motor driver	1	52	52	2.8	•	0.3 Ohm	Fixed overcurrent protection, hall effect logic, constant TOFF switchmode, brake function	PDIP24/SO24/PowerSO36
Motor combination									
Power stages									
L6260J	**Combo motor driver**							Register based architecture, 8/10bit D/A converter, UVLO	TQFP64
	• Voice coil/linear DC motor	1	6.5	5	1.5	•	1/5 Ohm	Linear selectable gain	
	• Brushless DC motor	1	6.5	5	2	•	0.4 Ohm	Linear selectable gain, FLL, sensorless	
L6287	**Combo motor driver**							ULVO on Vcc, hall sensor inputs	SDIP42
	• DC motor	1	18	5	1.5	•	2 Ohm	Constant frequency switchmode, open loop	
	• Brushless DC motor	1	18	5	2	•	1/1.6 Ohm	Constant frequency switchmode, speed closed loop	
L7250	**Combo motor driver**							Register based architecture, ISOFET, 10bit ADC voltage regulator and 33MHz serial interface	TQFP64
	• Voice coil/linear DC motor	1	14	6	2.0	•	0.9 Ohm (total@125C: sink+source)	Class A/B, 15bit DAC and ramp loading	
	• Brushless DC motor	1	14	6	2.5	•	0.9 Ohm (total@125C: sink+source)	Smooth drive digital architecture	
L6269	**Combo motor driver**							Register based architecture, and 25MHz serial interface	TQFP44
	• Voice coil/linear DC motor	1	14	6	1.5	•	1.6 Ohm (total@125C: sink+source)	Class A/B, and PWM, 14bit DAC	
	• Brushless DC motor	1	14	6	2.0	•	1.4 Ohm (total@125C: sink+source)	Integrated speed control loop (FLL)	
L6268	**Combo motor driver**							Register based architecture, and 25MHz serial interface	TQFP44Slug
	• Voice coil/linear DC motor	1	14	6	1.5	•	1.6 Ohm (total@125C: sink+source)	Class A/B, and PWM, 14bit DAC	
	• Brushless DC motor	1	14	6	2.0	•	1.4 Ohm (total@125C: sink+source)	Integrated speed control loop (FLL)	

Application notes are available at: www.st.com