

Motor Drive & Control Solutions



Lineup Overview

Stepping motor drivers

Part Number	Ratings		Motor		Interface			Stepping Mode						Features						Protection		Temperature Range T _a [°C]	Package					
	V _{M(op)} [V]	I _{OUT(abs)} [A]	RON(typ) HSHLS [Ω]	Motor: Bipolar	Motor: Unipolar	Interface: Clock	Interface: Phase	Interface: Serial	Full	Half	1/4	1/8	1/16	1/32	1/64	1/128	#Motors (channels)	Large Mode (parallel channels)	Constant Current Control	Single Power Supply	Internal Regulator			Output M	ADMD	ACDS	AGC	AEC-Q100
TB62208FG	10-38	1.8	1.2	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HSOP28
TB62208FNG/FTG	10-38	1.8	1.0	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HTSSOP48/QFN48
TB62210FNG	10-38	1.0	1.2	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HTSSOP24
TB62211FNG	10-38	1.0	1.2	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HTSSOP24
TB62212FNG/FTAG	10-38	1.5	2.2	●	-	-	●	-	●	●	●	-	-	-	-	2	●	●	●	5	-	-	-	-	●	●	-40 to +85	HTSSOP48/QFN48
TB62213AFG/AFNG/AFTG/AHQ	10-38	3.0	0.6	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HSOP28/HTSSOP48/QFN48/HZIP25
TB62214AFG/AFNG/AFTG/FG/FNG/FTG	10-38	2.0	1.0	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HSOP28/HTSSOP48/QFN48
TB62215AFG/FNG/FTG/AHQ	10-38	3.0	0.6	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HSOP28/HTSSOP48/QFN48/HZIP25
TB62218AFG/AFNG/AFTG/FG/FNG/FTG	10-38	2.0	1.0	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	HSOP28/HTSSOP48/QFN48
TB62261FTAG/FTG	10-35	1.5	0.8	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	WQFN36/WQFN48
TB62262FTAG/FTG	10-35	1.5	0.8	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	WQFN36/WQFN48
TB62269FTAG/FTG	10-38	1.8	0.8	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-20 to +85	VQFN32/WQFN48
TB6560AFG/AFTG	4.5-34	2.5	0.35	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	-	-	-	-	-	-	●	-	-30 to +85	HQFP64/QFN48
TB6560AHQ	4.5-34	3.5	0.3	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	-	-	-	-	-	-	●	-	-30 to +85	HZIP25
TB6562AFG/ANG	10-34	1.5	1.5	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	-	-20 to +85	SSOP30/SDIP24
TB6600FG	8-42	4.5	0.4	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-30 to +85	HQFP64
TB6600HG	8-42	5.0	0.4	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	●	5	-	-	-	-	●	●	-30 to +85	HZIP25
TB6608FNG	2.5-13.5	0.8	1.5	●	-	-	●	-	●	●	●	-	-	-	-	1	-	●	-	-	-	-	-	-	●	-	-20 to +85	SSOP20
TB6615PG	0-26	0.4	-	-	●	●	-	-	●	●	●	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-30 to +85	DIP16
TB6674FAG/FG	8-22	0.2	2.9	●	-	-	●	-	●	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	●	●	-30 to +75	SSOP16/HSOP16

Brushed motor drivers

Part Number	Ratings			Features									Protection			Temperature Range T _A [°C]	Package
	V _{M(opr)} [V]	I _{OUT(abs)} [A]	R _{ON(typ)} HS+LS [Ω]	H-Bridge Circuits (channels)	Large Mode (parallel channels)	Constant Current PWM	Single Power Supply	Internal Regulator Output [V]	ACDS	AEC-Q100	Under Voltage Lockout (UVLO)	Over Current (ISD)	Over Temperature (TSD)				
TB62212FNG/FTAG	10-38	2.0	2.2	4	●	●	●	5	-	-	●	●	●	-40 to +85	HTSSOP48/QFB48		
TB62216FG/FNG/FTG	10-38	2.5	1.0	2	-	●	●	5	-	-	●	●	●	-20 to +85	HSOP28/TSSOP48/QFN48		
TB6552FNG/FTG	2.5-13.5	1.0	1.5	2	-	-	-	-	-	-	-	●	●	-20 to +85	SSOP16/WQFN16		
TB6559FG	10-30	2.5	1.3	1	-	-	●	5	-	-	-	●	●	-30 to +85	HSOP16		
TB6561FG/NG	10-36	1.5	1.5	2	-	-	●	5	-	-	-	●	●	-20 to +85	SSOP30/DIP24		
TB6568KQ	10-45	3.0	0.55	1	-	-	●	-	-	-	●	●	●	-40 to +85	HSIP7		
TB6569FG/FTG	10-45	4.5	0.55	1	-	●	●	-	-	-	●	●	●	-40 to +85	HSOP16/VQFN32		
TB6612FNG	2.5-13.5	2.0	0.5	2	-	-	-	-	-	-	●	-	●	-20 to +85	SSOP24		
TB6640AFTG/FTG	4.5-38	3.0	1.0	1	-	-	-	-	-	-	●	●	●	-40 to +85	WQFN48		
TB6641FG/FTG	10-45	4.5	0.55	1	-	-	●	5	-	-	●	●	●	-40 to +85	HSOP16/VQFN32		
TB6642FG/FTG	10-45	4.5	0.55	1	-	-	●	-	-	-	●	●	●	-40 to +85	HSOP16/VQFN32		
TB6643KQ	10-45	4.5	0.55	1	-	-	●	-	-	-	●	●	●	-40 to +85	HSIP7		
TB67H301FTG	4.5-38	3.0	1.0	1	-	●	-	-	-	-	●	●	●	-40 to +85	WQFN24		
TB67H302HG	8-42	5.0	0.4	2	-	●	●	5	-	-	●	●	●	-30 to +85	HZIP25		
TB67H303HG	8-42	10.0	0.2	1	-	●	●	5	-	-	●	●	●	-30 to +85	HZIP25		
TB67H400AFNG/AFTG/AHG/ANG	10-47	4.0	0.49	2	●	●	●	5	-	-	●	●	●	-20 to +85	HTSSOP48/WQFN48/HZIP25/SDIP24		
TB67H401FTG	10-47	3.0	0.49	2	●	●	●	5	-	-	●	●	●	-20 to +85	VQFN48		
TB67H410FTG/NG	10-47	2.5	0.8	2	●	●	●	5	-	-	●	●	●	-20 to +85	WQFN48/SDIP24		
TB67H420FTG	10-47	4.5	0.33	2	●	●	●	5	●	-	●	●	●	-20 to +85	VQFN48		
TB67H450FNG	4.5-44	3.5	0.6	1	-	-	-	-	-	-	●	●	●	-40 to +85	HSOP8		
TB67H451FNG	4.5-44	3.5	0.6	1	-	-	●	-	-	-	●	●	●	-40 to +85	HSOP8		
TB67H452FTG	6.3-38	3.5	0.6	4	●	●	●	5	-	-	●	●	●	-20 to +85	QFN48		
TB9051FTG	4.5-28	5.0	0.34	1	-	-	-	-	-	●	●	●	●	-40 to +125	QFN28		
TB9058FNG	7-18	2.0	2.2	1	-	-	●	5	-	●	-	●	●	-40 to +125	SSOP24		
TC78H600FNG/FTG	2.5-15	1.0	1.2	2	-	●	-	-	-	-	●	●	●	-20 to +85	SSOP20/WQFN24		
TC78H610FNG	2.5-15	1.0	1.2	2	-	-	-	-	-	-	●	●	●	-20 to +85	SSOP16		
TC78H611FNG	2.5-15	1.1	0.8	2	-	-	-	-	-	-	●	●	●	-30 to +85	TSSOP16		
TC78H620FNG	2.5-15	1.0	1.2	2	-	-	-	-	-	-	●	●	●	-20 to +85	SSOP16		
TC78H621FNG	2.5-15	1.1	0.8	2	-	-	-	-	-	-	●	●	●	-30 to +85	TSSOP16		
TC78H630FNG	2.5-15	2.1	0.4	1	-	-	-	-	-	-	●	●	●	-30 to +85	TSSOP16		
TC78H651AFNG	1.8-7	1.6	0.22	2	-	-	●	-	-	-	●	●	●	-40 to +105	TSSOP16		
TC78H651FNG	1.8-6	1.6	0.22	2	-	-	●	-	-	-	●	●	●	-40 to +105	TSSOP16		
TC78H653FTG	1.8-7	2.5	0.22	2	●	-	●	-	-	-	●	●	●	-40 to +105	VQFN16		
TC78H660FNG/FTG	2.5-16	2.0	0.48	2	-	-	●	-	●	-	●	●	●	-40 to +85	TSSOP16/VQFN16		
TC78S121FNG/FTG	8-38	3.5	0.6	4	●	●	●	5	-	-	●	●	●	-20 to +85	HTSSOP48/QFN48		
TC78S122FNG/FTG	8-38	3.5	0.6	4	●	●	●	5	-	-	●	●	●	-20 to +85	HTSSOP48/QFN48		

Brushless motor drivers

Part Number	Ratings			Phases	Hall Sensor Inputs (Analog/Digital)	Commutation				Features						Lead Angle Control		Protection		Temperature Range T _A [°C]	Package		
	V _{M(opr)} [V]	I _{OUT(abs)} [A]	R _{ON(typ)} HS+LS [Ω]			Square-wave	Sine-wave	Pseudo Sine-wave	Wide-angle (150°)	Single Power Supply	Internal Regulator Output [V]	Speed Control Input	Closed Loop Speed Control	AEC-Q100	External Input	Auto (current FB)	Auto (rpm FB)	Auto (Int. Phase Contr)	Under Voltage Lockout (UVLO)			Over Current (ISD)	Over Temperature (TSD)
TB6585AFTG/FG	4.5-42	1.8	0.7	3	3	-	●	-	-	●	4.4	Analog	-	-	●	●	-	-	●	●	●	-30 to +85	QFN48/HSOP36
TB6585FTG	4.5-42	1.0	0.7	3	3	-	●	-	-	●	4.4	Analog	-	-	●	●	-	-	●	●	●	-30 to +85	QFN48
TB6588FG	7-42	2.5	0.6	3	-	●	-	-	-	●	5	Analog	-	-	●	●	-	-	●	●	●	-30 to +105	HSOP36
TB6633AFNG/FNG	4-22	1.0	0.8	3	-	●	-	-	-	●	5	Analog	-	-	●	●	-	-	●	●	●	-30 to +105	SSOP24
TB67B001FTG	4-22	3.0	0.6	3	-	●	-	-	-	●	5	Analog/PWM	-	-	●	●	-	-	●	●	●	-40 to +105	VQFN36
TB67B008FNG/FTG	4-22	3.0	0.6	3	-	●	-	-	-	●	5	PWM	-	-	●	●	-	-	●	●	●	-40 to +105	SSOP24/WQFN24
TB67Z800FTG	4-22	3.0	0.3	3	-	-	-	-	-	●	5	6-line PWM	-	-	-	-	-	-	●	●	●	-40 to +105	VQFN36
TC78B002FNG/FTG	3.3-16	1.5	1.6	1	1	-	-	●	-	●	5	Analog	-	-	●	●	-	-	●	●	●	-40 to +105	SSOP16/WQFN16
TC78B015AFTG/CFTG	6-30	3.0	0.24	3	1	-	-	-	●	●	5	Analog/PWM	-	-	●	●	-	-	●	●	●	-40 to +85	WQFN36
TC78B015BFTG/FTG	6-22	3.0	0.24	3	1	-	-	-	●	●	5	Analog/PWM	-	-	●	●	-	-	●	●	●	-40 to +85	WQFN36
TC78B016FTG	6-30	3.0	0.24	3	3	-	●	-	-	●	5	Analog/PWM	-	-	●	●	-	-	●	●	●	-40 to +105	WQFN36
TC78B025FTG	5.5-16	3.5	0.2	3	1	-	●	-	●	●	5	Analog/PWM	●	-	●	●	-	-	●	●	●	-40 to +105	WQFN24

Brushless motor pre-drivers

Part Number	Ratings		MOSFET Configuration	Hall Sensor Inputs (Analog/Digital)	Commutation				Features						Lead Angle Control			Temperature Range, T _A [°C]	Package
	VM (opr) [V]	Phases			Square-wave	Sine-wave	Pseudo Sine-wave	Wide-angle (150°)	Single Power Supply	Internal Regulator Output [V]	Speed Control Input	Closed Loop Speed Control	AEC-Q100	External Input	Auto (current FB)	Auto (rpm FB)	Auto (Int. Phase Control)		
TB6605FTG	9-28	3	6*N-ch	3	-	•	-	-	•	5	PWM	-	-	•	-	•	-	-30 to +85	VQFN36
TB9062FNG	6.5-20	3	3*P-ch/3*N-ch	-	•	-	-	-	•	5	PWM	-	•	•	-	-	-	-40 to +125	SSOP24
TB9080FG	7-18	3	6*N-ch	3	-	•	-	-	•	5	Analog/PWM	-	•	•	-	-	-	-40 to +125	LQFP64
TB9081FG	4.5-28	3	6*N-ch	-	-	-	-	-	-	5	6-line PWM	-	•	-	-	-	-	-40 to +125	LQFP64
TB9083FTG	4.5-28	3	6*N-ch	-	-	-	-	-	-	-	6-line PWM	-	•	-	-	-	-	-40 to +150	VQFN48
TC78B004AFTG	10-28	3	6*N-ch	3	-	•	-	-	•	1.5, 5	Analog	-	-	-	•	-	-	-30 to +85	WQFN40
TC78B006AFNG/AFTG	3.5-30	1	2*P-ch/2*N-ch	1	-	-	•	-	•	5	PWM	-	-	-	-	-	-	-40 to +105	SSOP16/WQFN16
TC78B006BFNG/BFTG	3.5-30	1	2*P-ch/2*N-ch	1	-	-	•	-	•	5	Analog	-	-	-	-	-	-	-40 to +105	SSOP16/WQFN16
TC78B006CFNG/CFNG	3.5-30	1	2*P-ch/2*N-ch	1	-	-	•	-	•	5	Analog	-	-	-	-	-	-	-40 to +105	SSOP16/WQFN16
TC78B006FNG/FTG	3.5-30	1	2*P-ch/2*N-ch	1	-	-	•	-	•	5	PWM	-	-	-	-	-	-	-40 to +105	SSOP16/WQFN16
TC78B009FTG	9-27	3	6*N-ch	-	•	-	-	•	•	5	Analog/PWM/I ² C	•	-	I ² C	-	-	-	-40 to +105	WQFN36
TC78B027FTG	5.5-16	3	6*N-ch	1	-	•	-	•	•	5	Analog/PWM	•	-	-	-	•	•	-40 to +105	WQFN24

NEW

Controller for high voltage intelligent power devices

Part Number	Ratings		Hall Sensor			Commutation		Features			Lead Angle Control				Temperature Range T _A [°C]	Package
	VM (opr) [V]	Number of Inputs	Analog Inputs	Digital Inputs	Square-wave	Sine-wave	Single Power Supply	Internal Regulator Output [V]	Speed Control Input	External Input	Auto (current FB)	Auto (rpm FB)	Auto (nPAC)			
TB6551FAG	6-10	3	-	•	-	•	•	5	Analog	•	-	-	-	-30 to +115	SSOP24	
TB6556FG	6-10	3	-	•	•	•	•	5	Analog	•	•	-	-	-30 to +115	SSOP30	
TB6575FNG	4.5-5.5	-	-	-	•	-	•	-	Analog	•	-	-	-	-30 to +105	SSOP24	
TB6584AFNG/FNG	6-16.5	3	•	•	-	•	•	5	Analog	•	•	-	-	-30 to +115	SSOP30	
TB6586AFG/BFG/FG	6.5-16.5	3	•	•	•	-	•	5	Analog	•	-	-	-	-30 to +115	SSOP24	
TB6631FNG	7-16.5	3	•	•	-	-	•	5	Analog	•	-	•	-	-30 to +115	SSOP30	
TB6634FNG	6-16.5	3	•	•	-	-	•	5	Analog	•	•	-	-	-30 to +115	SSOP30	
TB67B054FTG	6-16.5	3	•	•	-	•	•	5	Analog	•	•	-	-	-30 to +115	VQFN32	
TC78B041FNG	6-16.5	3	•	•	-	•	•	5	Analog	•	-	•	•	-30 to +115	SSOP30	
TC78B042FTG	6-16.5	3	•	•	-	•	•	5	Analog	•	-	•	•	-30 to +115	VQFN32	

High voltage intelligent power devices

Part Number	Ratings				Hall Sensor Inputs (Analog/Digital)	Commutation			Features						Protection				Temperature Range [°C]	Package
	VM (abs) [V]	VM (opr) [V]	VCC (opr) [V]	IOUT (abs) [A]		Square-wave	Sine-wave	Wide-angle (150°)	6-Line / 3-Phase Input	PWM / 3-Phase Decoder	Forward/Reverse Selection	Rotation Pulse Selection	Lead Angle Control	Output Shut Down	Current Limit	Over Current (ISD)	Over Temperature (TSD)	Under Voltage (UML0)		
TB67B000AFG/AHG/FG/HG	500	50-450	13.5-16.5	2.0	3	-	•	•	-	•	•	•	•	-	•	•	•	•	-30 to +115 (T _A)	HSSOP34/HDIP30
TPD4142K	500	50-450	13.5-17.5	1.0	3	•	-	-	-	•	•	-	-	-	•	•	•	•	-40 to +135 (T _J)	HDIP26
TPD4146K	500	50-450	13.5-17.5	1.0	3	•	-	-	-	•	•	-	-	-	•	•	•	•	-40 to +135 (T _J)	HDIP26
TPD4152F	600	50-450	13.5-17.5	0.7	3	•	-	-	-	•	•	-	-	-	•	•	•	•	-40 to +135 (T _J)	HSSOP31
TPD4162F	600	50-450	13.5-17.5	0.7	3	•	-	-	-	•	•	-	-	-	•	•	•	•	-40 to +135 (T _J)	HSSOP31
TPD4166F	600	50-450	13.5-17.5	1.0	3	•	-	-	-	•	•	-	-	-	•	•	•	•	-40 to +135 (T _J)	HSSOP31
TPD4204F	600	50-450	13.5-16.5	2.5	-	-	•	-	•	-	-	-	-	-	•	•	•	•	-40 to +100 (T _J)	SSOP30
TPD4206F	500	50-450	13.5-16.5	2.5	-	-	•	-	•	-	-	-	-	-	•	•	•	•	-40 to +100 (T _J)	SSOP30
TPD4207F	600	50-450	13.5-16.5	5.0	-	-	•	-	•	-	-	-	-	-	•	•	•	•	-40 to +100 (T _J)	SSOP30

NEW

NEW