

Appendix A:

Command Quick Reference

(commands listed alphabetically)

Command	Description	GT	GV	GT6	GV6	Type/Group	Syntax	Units	Range	Default
A	Acceleration	--	--	X	X	Motion	<a_><!>A<r>	revs/sec/sec	0.0001 - 9999.9999	10.0000
AA	Acceleration (S-Curve)	--	--	X	X	Motion (S-curve)	<a_><!>AA<r>	revs/sec/sec	0.0001 - 9999.9999	10.0000
AD	Deceleration	--	--	X	X	Motion	<a_><!>AD<r>	revs/sec/sec	0.0001 - 9999.9999	10.0000
ADA	Deceleration (S-Curve)	--	--	X	X	Motion (S-curve)	<a_><!>ADA<r>	revs/sec/sec	0.0001 - 9999.9999	10.0000
ADDR	<input checked="" type="checkbox"/> Multiple Unit Auto-Address	X	X	X	X	Comm. I/F	<a_><!>ADDR<i>	unit address	0 - 99	0
ANICDB	Command Input Deadband	X	X	--	--	Drive Config.	<a_><!>ANICDB<r>	Volts	0.00 - 10.00	0.04
BOT	Beginning Transmission Characters	X	X	X	X	Comm. I/F	<!>BOT<i>,<i>,<i>	ASCII equivalent	0 - 255	0,0,0
C	Continue Command Exec.	--	--	X	X	Prog. Flow	<a_>!C	N/A	N/A	N/A
CERRLG	Clear Error Log	X	X	X	X	Error Handlg	<a_><!>CERRLG	N/A	N/A	N/A
COMEXC	<input checked="" type="checkbox"/> Continuous Command Processing Mode	--	--	X	X	Command Buffer Contrl	<a_><!>COMEXC	enable bit	0 (disable), 1 (enable)	0
COMEXL	<input checked="" type="checkbox"/> Continue Execution on Limit	--	--	X	X	Command Buffer Contrl	<a_><!>COMEXL	enable bit	0 (disable), 1 (enable)	0
COMEXR	<input checked="" type="checkbox"/> Continue Motion on Pause/Continue Input	--	--	X	X	Command Buffer Contrl	<a_><!>COMEXR	enable bit	0 (disable), 1 (enable)	0
COMEXS	<input checked="" type="checkbox"/> Continue Execution on Stop	--	--	X	X	Command Buffer Contrl	<a_><!>COMEXS<i>	function ID	0, 1, or 2	0
D	Distance	--	--	X	X	Motion	<a_><!>D<r>	distance (counts)	-2 ³¹ to +2 ³¹ -1	4000
DABSD	<input checked="" type="checkbox"/> Enable ABS Damping	X	--	X	--	Drive Config.	<a_><!>DABSD	enable bit	0 (disable), 1 (enable)	0
DACTDP	<input checked="" type="checkbox"/> Active Damping Gain	X	--	X	--	Drive Config.	<a_><!>DACTDP<i>	gain value	0 - 40	4
DAUTOS	<input checked="" type="checkbox"/> Auto Standby Reduction	X	--	X	--	Drive Config.	<a_><!>DAUTOS<r>	percentage	0.00 - 99.99	0
DCLRLR	Clear Latched Status Register	X	X	X	X	Drive Config.	<a_><!>DCLRLR	N/A	N/A	N/A
DCMDZ	<input checked="" type="checkbox"/> Zero The Drive Command Offset	X	X	--	--	Drive Config.	<a_><!>DCMDZ	N/A	N/A	N/A
DDAMPA	<input checked="" type="checkbox"/> Damping During Accel	X	--	X	--	Drive Config.	<a_><!>DDAMPA	enable bit	0 (disable), 1 (enable)	0
DEF PROF	<input checked="" type="checkbox"/> Define a Profile	--	--	X	X	Compiled Motion	<a_><!>DEF PROF<i>	profile ID #	1 - 16	N/A
DEF PROG	<input checked="" type="checkbox"/> Define a Program	--	--	X	X	Program Def.	<a_><!>DEF PROG<i>	program ID #	1 - 32	N/A
DEL PROF	Delete Profile	--	--	X	X	Compiled Motion	<a_><!>DEL PROF<i>	profile ID #	1 - 16	N/A
DEL PROG	Delete Program	--	--	X	X	Program Def.	<a_><!>DEL PROG<i>	program ID #	1 - 32	N/A
DELVIS	<input checked="" type="checkbox"/> Electronic Viscosity Enable	X	--	X	--	Drive Config.	<a_><!>DELVIS<i>	gain	0 - 7 (0 = disabled)	0
DIBW	<input checked="" type="checkbox"/> Current Loop Bandwidth	--	X	--	X	Tuning	<a_><!>DIBW<i>	Hz	0 - 5000	0 (auto)
DIFOLD	<input checked="" type="checkbox"/> Current Foldback Enable	--	X	--	X	Drive Config.	<a_><!>DIFOLD	enable bit	0 (disable), 1 (enable)	0
DIGN	<input checked="" type="checkbox"/> Current Loop Gain	X	--	X	--	Tuning	<a_><!>DIGN<r>	c: gain identifier r: value of gain	DIGNA-C: 0.000 - 15.000 DIGND: 0.000 - 1.000	0 (auto)
DMEPIT	<input checked="" type="checkbox"/> Motor Electrical Pitch	--	X	--	X	Motor	<a_><!>DMEPIT<r>	millimeters	0.00 - 327.68	0 (auto)
DMODE	<input checked="" type="checkbox"/> Drive Control Mode	X	X	X	X	Drive Config.	<a_><!>DMODE<i>	control mode	1 - 17	GV: 2, GT: 6, GT6/GV6: 12
DMONAS	<input checked="" type="checkbox"/> Analog Monitor Output A Scaling	X	X	X	X	Outputs	<a_><!>DMONAS<i>	%	-2000 - 2000	100
DMONAV	<input checked="" type="checkbox"/> Analog Monitor Output A Variable	X	X	X	X	Outputs	<a_><!>DMONAV<i>	variable number	0 - 24	0
DMONBS	<input checked="" type="checkbox"/> Analog Monitor Output B Scaling	X	X	X	X	Outputs	<a_><!>DMONBS<i>	%	-2000 - 2000	100
DMONBV	<input checked="" type="checkbox"/> Analog Monitor Output B Variable	X	X	X	X	Outputs	<a_><!>DMONBV<i>	variable number	0 - 24	0
DMTAMB	<input checked="" type="checkbox"/> Motor Ambient Temp.	--	X	--	X	Motor	<a_><!>DMTAMB<r>	Degrees Celsius	-50.0 - 250.0	40.0
DMTD	<input checked="" type="checkbox"/> Motor Damping	--	X	--	X	Motor	<a_><!>DMTD<r>	R: Nm/rad/sec L: N/meter/sec	R: 0.000000 - 0.010000 L: DMEPIT dependent	0 (auto)
DMTIC	<input checked="" type="checkbox"/> (GV) <input checked="" type="checkbox"/> Continuous Current	X	X	X	X	Motor	<a_><!>DMTIC<r>	Amps-RMS	0.00 - 100.00	0 (auto)
DMTICD	<input checked="" type="checkbox"/> Continuous Current Derating	--	X	--	X	Motor	<a_><!>DMTICD<r>	%	0.00 - 100.00	0 (auto)
DMTIND	<input checked="" type="checkbox"/> Motor Inductance	X	--	X	--	Motor	<a_><!>DMTIND<r>	mH	0.0 - 200.0	0 (auto)
DMTIP	<input checked="" type="checkbox"/> Peak Current	--	X	--	X	Motor	<a_><!>DMTIP<r>	Amps-RMS	0.00 - 128.00	0 (auto)
DMTJ	<input checked="" type="checkbox"/> Motor Rotor Inertia or Motor Mass	X	X	X	X	Motor	<a_><!>DMTJ<r>	R: kgm ² * 10 ⁻⁶ L: kg	R: 0.000 - 10000.000 L: DMEPIT dependent	0 (auto)

◆ = requires reset (RESET, cycle power, or reset input) to apply.
 = saved in EEPROM (Gn6: only if executed outside a program).
(auto) = Auto-configured based on motor selection, see DMTR.

Command	Description	GT	GV	GT6	GV6	Type/Group	Syntax	Units	Range	Default
DMTKE	Motor Ke	--	X	--	X	Motor	<a_><!>DMTKE<r>	R: V(0-peak)/krpm L: volts/meter/sec	R: 0.0 - 200.0 L: DMEPIT dependent	0 (auto)
DMTLIM	Torque/Force Limit	--	X	--	X	System	<a_><!>DMTLIM<r>	R: Nm L: N	R: 0.0 - 500.0 L: DMEPIT dependent	500 (auto)
DMTLMN	Minimum Motor Inductance	--	X	--	X	Motor	<a_><!>DMTLMN<r>	mH	0.1 - 200.0	0 (auto)
DMTLMX	Maximum Motor Inductance	--	X	--	X	Motor	<a_><!>DMTLMX<r>	mH	0.1 - 200.0	0 (auto)
DMTMAX	Maximum Motor Winding Temperature	--	X	--	X	Motor	<a_><!>DMTMAX<r>	Decreases Celsius	-50.0 - 250.0	125°C (auto)
DMTR	Identify Motor	X	X	X	X	Drive Config.	<a_><!>DMTR<i>	motor number	0 - 2000	-1
DMTRES	Motor Winding Resistance	X	X	X	X	Motor	<a_><!>DMTRES<r>	Ohm	0.00 - 50.00	0 (auto)
DMTRWC	Motor Winding Thermal Resistance	--	X	--	X	Motor	<a_><!>DMTRWC<r>	°C/Watt	0.00 - 50.00	0 (auto)
DMTSCL	Torque/Force Scaling	--	X	--	X	Drive Config.	<a_><!>DMTSCL<r>	R: Nm L: N	R: 0.0 - 500.0 L: DMEPIT dependent	0 (auto)
DMTSTT	Motor Static Torque	X	--	X	--	Motor	<a_><!>DMTSTT<r>	oz-in	0.0 - 5000.0	0 (auto)
DMTTCM	Motor Thermal Time Constant	--	X	--	X	Motor	<a_><!>DMTTCM<r>	minutes	0.0 - 300.0	0 (auto)
DMTTCW	Motor Winding Time Constant	--	X	--	X	Motor	<a_><!>DMTTCW<r>	minutes	0.00 - 100.00	0 (auto)
DMTW	Motor Rated Speed	--	X	--	X	Motor	<a_><!>DMTW<r>	R: revs/sec L: meters/sec	R: 0.0 - 200.0 L: DMEPIT dependent	0 (auto)
DMVLIM	Velocity Limit	X	X	X	X	System	<a_><!>DMVLIM<r>	R: revs/sec L: meters/sec	R (GT): 0.000000-60.000000 (GV): 0.000000-200.000000 L: DMEPIT dependent	GT: 50 (auto) GV: 200 (auto)
DMVSCL	Velocity Scaling	X	X	--	--	Drive Config.	<a_><!>DMVSCL<r>	R: revs/sec L: meters/sec	R (GT): 0.000000-60.000000 (GV): 0.000000-200.000000 L: DMEPIT dependent	GT: 50 (auto) GV: 0 (auto)
DNOTAD	Notch Filter A Depth	--	X	--	X	Tuning	<a_><!>DNOTAD<r>	N/A	0.0000 - 1.0000	0
DNOTAF	Notch Filter A Frequency	--	X	--	X	Tuning	<a_><!>DNOTAF<r>	Hz	0, 60 - 1000 (0=disable)	0
DNOTAQ	Notch Filter A Quality Factor	--	X	--	X	Tuning	<a_><!>DNOTAQ<r>	quality factor	0.5 - 2.5	1
DNOTBD	Notch Filter B Depth	--	X	--	X	Tuning	<a_><!>DNOTBD<r>	N/A	0.0000 - 1.0000	0
DNOTBF	Notch Filter B Frequency	--	X	--	X	Tuning	<a_><!>DNOTBF<r>	Hz	0, 60 - 1000 (0=disable)	0
DNOTBQ	Notch Filter B Quality Factor	--	X	--	X	Tuning	<a_><!>DNOTBQ<r>	quality factor	0.5 - 2.5	1
DNOTLD	Notch Lead Filter Break Frequency	--	X	--	X	Tuning	<a_><!>DNOTLD<i>	Hz	0, 80 - 1000 (0=disable)	0
DNOTLG	Notch Lag Filter Break Frequency	--	X	--	X	Tuning	<a_><!>DNOTLG<i>	Hz	0, 20 - 1000 (0=disable)	0
DPBW	Position Loop Bandwidth	--	X	--	X	Tuning	<a_><!>DPBW<r>	Hz	1.00 - 100.00	5 (auto)
DPHAL	Phase Balance	X	--	X	--	Drive Config.	<a_><!>DPHAL<r>	%	90.0 - 110.0	100
DPHOFA	Phase A Current Offset	X	--	X	--	Drive Config.	<a_><!>DPHOFA<r>	%	-10.000 - 10.000	0
DPHOFB	Phase B Current Offset	X	--	X	--	Drive Config.	<a_><!>DPHOFB<r>	%	-10.000 - 10.000	0
DPOLE	Motor Pole Pairs	X	X	X	X	Motor	<a_><!>DPOLE<i>	pole pairs	1 - 200	0 (auto)
DPWM	Drive PWM Frequency	--	X	--	X	Drive Config.	<a_><!>DPWM<i>	Hz	0, 8, 16, 20 or 40	8 (L3 is 40)
DRES	Drive Resolution	X	X	X	--	Drive Config.	<a_><!>DRES<i>	R: counts/rev L: counts/epitch	GT: 200 - 128000 GV: 200 - 1024000	GT: 25000 GV: 4000
DRIVE	Drive Enable	X	X	X	X	Drive Config.	<a_><!>DRIVE	enable bit	0 (shutdown), 1 (enable)	1
DSTALL	Stall Detect Sensitivity	X	--	X	--	Drive Config.	<a_><!>DSTALL<i>	stall sensitivity	0 - 50 (0 = disable)	0
DVBW	Velocity Loop Bandwidth	--	X	--	X	Tuning	<a_><!>DVBW<i>	Hz	0 - 500	0 (auto)
DWAVEF	Waveform	X	--	X	--	Drive Config.	<a_><!>DWAVEF<r>	%	-20.00 - 10.00	-4
E	Enable Communication	X	X	X	X	Comm. I/F	<a_><!>E	enable bit	0 (disable), 1 (enable)	1
ECHO	Communication Echo	X	X	X	X	Comm. I/F	<a_><!>ECHO	enable bit	0 (disable), 1 (enable)	1
ELSE	Else Condition (IF = false)	--	--	X	X	Prog. Flow	<a_><!>ELSE	N/A	N/A	N/A
END	End Program/Profile Def(n)	--	--	X	X	Program Def.	<a_><!>END	N/A	N/A	N/A
EOL	End-of-Line Characters	X	X	X	X	Comm. I/F	<!>EOL<i>, <i>, <i>	ASCII equivalent	0 - 255	13,10,0
EOT	End-of-Transmission Characters	X	X	X	X	Comm. I/F	<!>EOT<i>, <i>, <i>	ASCII equivalent	0 - 255	13,0,0
ERASE	Delete Programs / Profiles	--	--	X	X	Program Def.	<a_><!>ERASE	N/A	N/A	N/A
ERES	Encoder Resolution or Resolver Resolution	--	X	--	X	Drive Config.	<a_><!>ERES<i>	R: counts/rev L: counts/epitch	200 - 1024000	4000 (auto)
ERRBAD	Error Prompt	X	X	X	X	Comm. I/F	<!>ERRBAD<i>, <i>, <i>, <i>	ASCII equivalent	0 - 255	13,10,63,32
ERRDEF	Program Definition Prompt	X	X	X	X	Comm. I/F	<!>ERRDEF<i>, <i>, <i>, <i>	ASCII equivalent	0 - 255	13,10,45,32
ERRLVL	Error Detection Level	X	X	X	X	Comm. I/F	<a_><!>ERRLVL<i>	error level setting	0, 2, or 3	3
ERROK	Good Prompt	X	X	X	X	Comm. I/F	<!>ERROK<i>, <i>, <i>, <i>	ASCII equivalent	0 - 255	13,10,62,32
ERROR	Error Checking Enable	--	--	X	X	Error Handlg	<a_><!>ERROR...	enable bit	0 (disable), 1 (enable), X	0
ERRORP	Error Program Assign.	--	--	X	X	Error Handlg	<a_><!>ERROR PROG<i>	program ID #	0, 1 - 32 (0 = unassign)	0
ESK	Fault on Stall Enable	X	--	X	--	Drive Config.	<a_><!>ESK	enable bit	0 (disable), 1 (enable)	1
FLTDSB	Fault on Drive Disable	X	X	X	X	Drive Config.	<a_><!>FLTDSB	enable bit	0 (disable), 1 (enable)	1
FLTSTP	Fault on Startup Indexer Pulses	X	X	--	--	Drive Config.	<a_><!>FLTSTP	enable bit	0 (disable), 1 (enable)	1
GO	Initiate Motion	--	--	X	X	Motion	<a_><!>GO	N/A	0 (don't go), 1 (go)	1
GOBUF	Store Compiled Motion Segment	--	--	X	X	Compiled Motion	<a_><!>GOBUF	N/A	0 (don't go), 1 (go)	1
GOSUB	Call a Subroutine	--	--	X	X	Prog. Flow	<a_><!>GOSUB PROG<i>	program ID #	1 - 32	N/A
GOWHEN	Conditional GOBUF	--	--	X	X	Comp. Motion	<a_><!>GOWHEN(T=i)	i = milliseconds	1 - 999999	N/A
HOM	Go Home	--	--	X	X	Homing	<a_><!>HOM	enable bit	0 (home pos.), 1 (home neg.)	N/A
HOMA	Home Acceleration	--	--	X	X	Homing	<a_><!>HOMA<r>	revs/sec/sec	0.0001 - 9999.9999	10
HOMBAC	Home Backup	--	--	X	X	Homing	<a_><!>HOMBAC	enable bit	0 (disable), 1 (enable)	0
HOMDF	Home Final Direction	--	--	X	X	Homing	<a_><!>HOMDF	N/A	0 (pos. dir.), 1 (neg. dir.)	0
HOMEDG	Home Reference Edge	--	--	X	X	Homing	<a_><!>HOMEDG	N/A	0 (pos. dir.), 1 (neg. dir.)	0

◆ = requires reset (RESET, cycle power, or reset input) to apply.
☒ = saved in EEPROM (Gn6: only if executed outside a program).
(auto) = Auto-configured based on motor selection, see DMTR.

Command	Description	GT	GV	GT6	GV6	Type/Group	Syntax	Units	Range	Default
HOMV	<input checked="" type="checkbox"/> Home Velocity	--	--	X	X	Homing	<a_><!>HOMV<r>	revs/sec	0.000 – 200.0000	1
HOMVF	<input checked="" type="checkbox"/> Home Final Velocity	--	--	X	X	Homing	<a_><!>HOMVF<r>	revs/sec	0.000 - 200.0000	0.1000
HOMZ	<input checked="" type="checkbox"/> Home to Encoder Z Channel	--	--	--	X	Homing	<a_><!>HOMZ	enable bit	0 (disable), 1 (enable)	0
IF	IF Conditional Statement	--	--	X	X	Prog. Flow	<a_><!>IF(<op>= <a_><!>IF(<op>.<i>=	<op> = operand = binary state <i> = selected bit	<op>: AS, ASX, ER, IN, SS : 1 or 0 <i>: 1 - 32 (varies by operand)	N/A
INDEB	<input checked="" type="checkbox"/> Input Debounce Time	X	X	X	X	Inputs	<a_><!>INDEB<i>	milliseconds	2 - 250	50
INFNC	<input checked="" type="checkbox"/> Input Function Assignment	--	--	X	X	Inputs	<a_><!>INFNC<i><c>	<i> = input # <c> = function ID	<i>: 1 - 8 <c>: A (general purpose), B (BCD), C (kill), E (pause), F (fault), H (trigger), R (EOT limit, pos), S (EOT limit, neg), or T (home limit).	INFNC1-R INFNC2-S INFNC3-T INFNC4-H
INLVL	<input checked="" type="checkbox"/> Input Level Sense	X	X	X	X	Inputs	<a_><!>INLVL<bb...>	N/A	0 (active low), 1 (active high)	11000000
INSELP	Program Select Mode	--	--	X	X	Inputs	<a_><!>INSELP,<i>	: enable bit <i>: strobe (ms)	: 0 (disable), 1 (enable) <i>: 0 - 5000	: 0 <i>: 0
INUFD	User Fault Input Delay	X	X	X	X	Inputs	<a_><!>INUFD<i>	Milliseconds	0 – 1000	0
JUMP	Jump to a Program	--	--	X	X	Prog. Flow	<a_><!>JUMPPROG<i>	program ID #	1 - 32	N/A
K	Kill Motion	--	--	X	X	Motion	<a_><!>K	enable bit	0 (don't kill), 1 (kill)	1
KDRIVE	<input checked="" type="checkbox"/> Disable Drive on Kill	--	--	X	X	Drive Config.	<a_><!>KDRIVE	enable bit	0 (disable), 1 (enable)	0
L	Loop	--	--	X	X	Prog. Flow	<a_><!>L<i>	# of times to loop	0 – 999,999,999 (0 = infinite)	0 (infinite)
LDAMP	<input checked="" type="checkbox"/> Load Damping	--	X	--	X	System	<a_><!>LDAMP<r>	R: Nm/rad/sec L: N/meter/sec	R: 0.0000 - 1.0000 L: DMEPIT dependent	0
LH	<input checked="" type="checkbox"/> Hardware End-of-Travel Limit Enable	X	X	X	X	EOT Limit; Drive config.	<a_><!>LH<i>	N/A	0 (disable both limits), 1 (disable pos. dir. limit only), 2 (disable neg. dir. limit only), 3 (enable both limits)	GT/GV: 0 GT6/GV6: 3
LHAD	<input checked="" type="checkbox"/> Hardware EOT Limit Deceleration	--	--	X	X	EOT Limit	<a_><!>LHAD<r>	revs/sec/sec	0.0001 - 9999.9999	100.0000
LHADA	<input checked="" type="checkbox"/> Hardware EOT Limit Deceleration (S-Curve)	--	--	X	X	EOT Limit; Motion (S)	<a_><!>LHADA<r>	revs/sec/sec	0.0001 - 9999.9999	100.0000
LJRAT	<input checked="" type="checkbox"/> Load-to-Rotor Inertia Ratio or Load-to-Forcer Ratio	X	X	X	X	System	<a_><!>LJRAT<r>	ratio	0.0 - 100.0	0
LN	End of Loop	--	--	X	X	Prog. Flow	<a_><!>LN	N/A	N/A	N/A
LS	<input checked="" type="checkbox"/> Software End-of-Travel Limit Enable	--	--	X	X	EOT Limit	<a_><!>LS<i>	N/A	0 (disable both limits), 1 (disable pos. dir. limit only), 2 (disable neg. dir. limit only), 3 (enable both limits)	0
LSAD	<input checked="" type="checkbox"/> Software EOT Limit Decel	--	--	X	X	EOT Limit	<a_><!>LSAD<r>	revs/sec/sec	0.0001 - 9999.9999	100.0000
LSADA	<input checked="" type="checkbox"/> Software EOT Limit Decel (S-Curve)	--	--	X	X	EOT Limit; Motion (S)	<a_><!>LSADA<r>	revs/sec/sec	0.0001 - 9999.9999	100.0000
LSNEG	<input checked="" type="checkbox"/> Software Limit Negative Range	--	--	X	X	EOT Limit	<a_><!>LSNEG<r>	distance (counts)	-2 ³¹ to +2 ³¹ -1	0
LSPOS	<input checked="" type="checkbox"/> Software Limit Positive Range	--	--	X	X	EOT Limit	<a_><!>LSPOS<r>	distance (counts)	-2 ³¹ to +2 ³¹ -1	0
MA	Incremental/Absolute (Preset) Positioning Mode	--	--	X	X	Motion	<a_><!>MA	N/A	0 (incremental positioning), 1 (absolute positioning)	0
MC	Preset/Continuous Positioning Mode	--	--	X	X	Motion	<a_><!>MC	N/A	0 (preset positioning), 1 (continuous positioning)	0
NIF	End of IF Statement	--	--	X	X	Prog. Flow	<a_><!>NIF	N/A	N/A	N/A
ORES	<input checked="" type="checkbox"/> Resolution of Step & Direction Output (GT) or Encoder Output (GV)	X	X	X	X	Drive Config.	<a_><!>ORES<i>	R: counts/rev L: counts/epitch	GT: 0, 200 - 128000 GV: 0, 200 - 1024000 (0 = disable)	GT: 0 GV: 4000
OUT	Output State Manipulation	--	--	X	X	Outputs	<a_><!>OUT<bbbbbb> <a_><!>OUT.<i>	 = enable bit <i> = output #	: 0 (off), 1 (on), or X (ignore) <i>: 1 - 7	0
OUTBD	Brake Output Delay	X	X	X	X	Outputs	<a_><!>OUTBD<i>	milliseconds	0 – 1000	0
OUTFNC	<input checked="" type="checkbox"/> Output Function Assignment	--	--	X	X	Outputs	<a_><!>OUTFNC<i><c>	<i> = output # <c> = function ID	<i>: 1 - 8 <c>: A (general purpose), B (moving/hot moving), C (program in progress), D (EOT limit hit), E (stall), F (fault), or G (position error).	OUTFNC1-A OUTFNC2-F OUTFNC3-D OUTFNC4-E OUTFNC5-B OUTFNC6-A OUTFNC7-F
PLN	End of Loop, Compiled Motion	--	--	X	X	Compiled Motion	<a_>PLN	N/A	N/A	N/A
PLOOP	Beginning of Loop, Compiled Motion	--	--	X	X	Compiled Motion	<a_>PLOOP<i>	# of times to loop	0 – 999,999,999 (0 = infinite)	0 (infinite)
OUTLVL	<input checked="" type="checkbox"/> Output Level Sense	X	X	X	X	Outputs	<a_><!>OUTLVL<bb.>	N/A	0 (active low), 1 (active high)	0000000
POUTA	Compiled Output	--	--	X	X	Outputs	<a_><!>POUTA<bb.> <a_><!>POUTA.<i>	 = enable bit <i> = output #	: 0 (off), 1 (on), or X (ignore) <i>: 1 - 7	0
PRUNPROF	Run a Compiled Profile	--	--	X	X	Compiled Motion	<a_><!>PRUNPROF<i>	profile ID #	1 - 16	N/A
PS	Pause Program Execution	--	--	X	X	Prog. Flow	<a_><!>PS	N/A	N/A	N/A
PSET	Establish Absolute Position	--	--	X	X	Motion	<a_><!>PSET<r>	Counts (abs. pos.)	-2 ³¹ to +2 ³¹ -1	N/A
RE	<input checked="" type="checkbox"/> Registration Enable	--	--	X	X	Registration	<a_><!>RE	enable bit	0 (disable), 1 (enable)	0
REG	Registration Distance	--	--	X	X	Registration	<a_><!>REG<i>	distance (counts)	0 - 2,147,483,647	0
REGLOD	<input checked="" type="checkbox"/> Regist. Lockout Distance	--	--	X	X	Registration	<a_><!>REGLOD<i>	distance (counts)	0 - 2,147,483,647	0
RESET	Reset Drive	X	X	X	X	Comm. I/F	<a_><!>RESET	N/A	N/A	N/A
RFS	Return to Factory Settings	X	X	X	X	Drive Config.	<a_><!>RFS	N/A	N/A	N/A
RUNPROG	Run a Program	--	--	X	X	Prog. Def(n)	<a_><!>RUN PROG<i>	program ID #	1 - 32	N/A
S	Stop Motion	--	--	X	X	Motion	<a_><!>S	N/A	0 (don't stop), 1 (stop)	1
SFB	<input checked="" type="checkbox"/> Select Feedback Source	--	X	--	X	Drive Config.	<a_><!>SFB<i>	feedback selector	1 (encoder), 4 (resolver)	1 (auto)
SGAF	<input checked="" type="checkbox"/> Acceleration Feedforward	--	--	--	X	Tuning (Servo)	<a_><!>SGAF<i>	%	0 - 500	100

◆ = requires reset (RESET, cycle power, or reset input) to apply.
 = saved in EEPROM (Gn6: only if executed outside a program).
(auto) = Auto-configured based on motor selection, see DMTR.

Command	Description	GT	GV	GT6	GV6	Type/Group	Syntax	Units	Range	Default
SGENB	Enable a Gain Set	--	--	--	X	Tuning (Servo)	<a_><!>SGENB<i>	gain set ID #	1 - 3	N/A
SGINTE	<input checked="" type="checkbox"/> Integrator Enable	--	X	--	X	Tuning (Servo)	<a_><!>SGINTE	enable bit	0 (disable), 1 (enable)	1
SGIRAT	<input checked="" type="checkbox"/> Current Damping Ratio	--	X	--	X	Tuning (Servo)	<a_><!>SGIRAT<r>	ratio	0.500 - 2.000	1
SGPRAT	<input checked="" type="checkbox"/> Position Damping Ratio	--	X	--	X	Tuning (Servo)	<a_><!>SGPRAT<r>	ratio	0.500 - 2.000	1
SGPSIG	<input checked="" type="checkbox"/> Velocity/Position Bandwidth Ratio	--	X	--	X	Tuning (Servo)	<a_><!>SGPSIG<r>	ratio	0.100 - 2.000	1
SGSET	Save a Gain Set	--	--	--	X	Tuning (Servo)	<a_><!>SGSET<i>	gain set ID #	1 - 3	N/A
SGVGF	<input checked="" type="checkbox"/> Velocity Feedforward Gain	--	--	--	X	Tuning (Servo)	<a_><!>SGVGF<i>	%	0 - 500	100
SGVRAT	<input checked="" type="checkbox"/> Velocity Damping Ratio	--	X	--	X	Tuning (Servo)	<a_><!>SGVRAT<r>	ratio	0.500 - 2.000	1
SHALL	<input checked="" type="checkbox"/> Hall Sensor Inversion	--	X	--	X	Drive Config.	<a_><!>SHALL<i>	option selector	0 (do not invert), 1 (invert)	0
SMPER	<input checked="" type="checkbox"/> Maximum Position Error	--	X	--	X	Drive Config.	<a_><!>SMPER<i>	counts	0 - 2,147,483,647 (0 = disable)	4000
SMVER	<input checked="" type="checkbox"/> Maximum Velocity Error	--	X	--	X	Drive Config.	<a_><!>SMVER<r>	revs/sec	0.000000 - 200.000000 (0 = disable)	0
SRSET	<input checked="" type="checkbox"/> Resolver Offset Angle	--	X	--	X	Drive Config.	<a_><!>SRSET<r>	degrees	1.0 - 180.0 (none = auto set)	0 (auto)
STARTP	<input checked="" type="checkbox"/> Startup Program Assign.	--	--	--	X	Prog. Def(n)	<a_><!>STARTPPROG<i>	program ID #	0, 1 - 32 (0 = unassign)	N/A
STRGTD	<input checked="" type="checkbox"/> Target Zone Distance	--	--	--	X	Target Zone	<a_><!>STRGTD<i>	distance (counts)	0 - 999,999,999	50
STRGTE	<input checked="" type="checkbox"/> TargetZone Mode Enable	--	--	--	X	Target Zone	<a_><!>STRGTE	enable bit	0 (disable), 1 (enable)	0
STRGTT	<input checked="" type="checkbox"/> Target Zone Timeout	--	--	--	X	Target Zone	<a_><!>STRGTT<i>	milliseconds	0 - 5000	1000
STRGTV	<input checked="" type="checkbox"/> Target Zone Velocity	--	--	--	X	Target Zone	<a_><!>STRGTV<r>	R: revs/sec L: meters/sec	R: 0.0000 - 200.0000 L: DMEPIT dependent	1.0000
T	Time Delay (Dwell)	--	--	X	X	Prog. Flow	<a_><!>T<r>	seconds	0.001 - 999.999	N/A
TACC	Transfer Commanded Accel.	--	--	X	X	Transfer	<a_><!>TACC	revs/sec/sec	N/A	N/A
TACCA	Transfer Actual Accel.	--	--	--	X	Transfer	<a_><!>TACCA	revs/sec/sec	N/A	N/A
TANI	Transfer Axis Status	X	X	X	X	Transfer	<a_><!>TANI	volts	N/A	N/A
TAS	Transfer Axis Status	X	X	X	X	Transfer	<a_><!>TAS	bit field	N/A	N/A
TASF	TAS (Full Text Report)	X	X	X	X	Transfer	<a_><!>TASF	N/A	N/A	N/A
TASX	Transfer Extended Axis Status	X	X	X	X	Transfer	<a_><!>TASX	bit field	N/A	N/A
TASXF	TASX (Full Text Report)	X	X	X	X	Transfer	<a_><!>TASXF	N/A	N/A	N/A
TCS	Transfer Config. Status	X	X	X	X	Transfer	<a_><!>TCS	error code	N/A	N/A
TDHRS	<input checked="" type="checkbox"/> Transfer Operating Hours	X	X	X	X	Transfer	<a_><!>TDHRS	hours	N/A	N/A
TDICNT	Transfer Continuous Current Rating	X	X	X	X	Transfer	<a_><!>TDICNT	Amps peak	N/A	N/A
TDIMAX	Transfer Maximum Current Rating	--	X	--	X	Transfer	<a_><!>TDIMAX	Amps peak	N/A	N/A
TDIR	Transfer Programs Stored	--	--	X	X	Transfer	<a_><!>TDIR	N/A	N/A	N/A
TDTEMP	Transfer Drive Temperature	X	X	X	X	Transfer	<a_><!>TDTEMP	degrees C	N/A	N/A
TDVBUS	Transfer Bus Voltage	X	X	X	X	Transfer	<a_><!>TDVBUS	volts	N/A	N/A
TER	Transfer Error Status	X	X	X	X	Transfer	<a_><!>TER	bit field	N/A	N/A
TERF	TER (Full Text Report)	X	X	X	X	Transfer	<a_><!>TERF	N/A	N/A	N/A
TERRLG	<input checked="" type="checkbox"/> Transfer Error Log	X	X	X	X	Transfer	<a_><!>TERRLG	N/A	N/A	N/A
TGAIN	Transfer Active Gains	--	X	--	X	Transfer	<a_><!>TGAIN	N/A	N/A	N/A
THALL	Transfer Hall Sensor Values	--	X	--	X	Transfer	<a_><!>THALL	hall sensor values	N/A	N/A
TIN	Transfer Input Status	X	X	X	X	Transfer	<a_><!>TIN	bit field	N/A	N/A
TINO	Transfer Other Input Status	X	X	X	X	Transfer	<a_><!>TINO	bit field	N/A	N/A
TMEM	Transfer Memory Usage	--	--	X	X	Transfer	<a_><!>TMEM	bytes (prog,prof)	N/A	N/A
TMTEMP	Transfer Motor Temp.	--	X	--	X	Transfer	<a_><!>TMTEMP	degrees C	N/A	N/A
TOUT	Transfer Output Status	X	X	X	X	Transfer	<a_><!>TOUT	bit field	N/A	N/A
TPC	Transfer Commanded Pos.	X	X	X	X	Transfer	<a_><!>TPC	counts	N/A	N/A
TPE	Transfer Actual Position	--	X	--	X	Transfer	<a_><!>TPE	feedback counts	N/A	N/A
TPER	Transfer Position Error	--	X	--	X	Transfer	<a_><!>TPER	counts	N/A	N/A
TPRA	Transfer Abs. Resolver Pos.	--	X	--	X	Transfer	<a_><!>TPRA	counts	0 - (ERES - 1)	N/A
TPROG	Transfer Program Contents	--	--	X	X	Transfer	<a_><!>TPROGPROG<i>	program ID #	1 - 32	N/A
TRACE	<input checked="" type="checkbox"/> Program Trace Mode	--	--	X	X	Debug Tools	<a_><!>TRACE	enable bit	0 (disable), 1 (enable)	0
TREV	Transfer Revision Level	X	X	X	X	Transfer	<a_><!>TREV	N/A	N/A	N/A
TRGFN	Trigger Interrupt Functions (GOBUF on trigger input)	--	--	X	X	Inputs	<a_><!>TRGFN<c>	<c> = input ID = enable bit	<c>: A-H (inputs 1-8) : 0 (disable), 1 (enable)	N/A
TRGLOT	<input checked="" type="checkbox"/> Trigger Interrupt Lockout	--	--	X	X	Inputs	<a_><!>TRGLOT<i>	milliseconds	0 - 250	24
TSGSET	Transfer Gain Set	--	--	--	X	Transfer	<a_><!>TSGSET<i>	gain set ID #	1 - 3	N/A
TSROFF	<input checked="" type="checkbox"/> Transfer Resolver Offset Angle	--	X	--	X	Transfer	<a_><!>TSROFF	degrees	-180.0 - +180.0	N/A
TSS	Transfer System Status	X	X	X	X	Transfer	<a_><!>TSS	bit field	N/A	N/A
TSSF	TSS (Full Text Report)	X	X	X	X	Transfer	<a_><!>TSSF	N/A	N/A	N/A
TSTLT	Transfer Settling Time	--	--	--	X	Transfer	<a_><!>TSTLT	milliseconds	N/A	N/A
TTRQ	Transfer Commanded Torque/Force	--	X	--	X	Transfer	<a_><!>TTRQ	% of DMTSCL	N/A	N/A
TTRQA	Transfer Actual Torque/Force	--	X	--	X	Transfer	<a_><!>TTRQA	% of DMTSCL	N/A	N/A
TVE	Transfer Velocity Error	--	X	--	X	Transfer	<a_><!>TVE	revs/sec	-200 - 200	N/A
TVEL	Transfer Commanded Vel.	X	X	X	X	Transfer	<a_><!>TVEL	revs/sec	-200.000000 - 200.000000	N/A
TVELA	Transfer Actual Velocity	--	X	--	X	Transfer	<a_><!>TELA	revs/sec	-200.000000 - 200.000000	N/A
V	Velocity	--	--	X	X	Motion	<a_><!>V<r>	revs/sec	0.0000 - 200.0000	1.0000
VARCLR	Variable Clear	--	--	X	X	Variables	<a_><!>VARCLR	N/A	N/A	N/A
VARI	Variable (Integer)	--	--	X	X	Variables	<a_><!>VARI<i>	variable number	1-99	N/A
VF	Final Velocity	--	--	X	X	Compiled Motion	<a_><!>VF<r>	N/A	0	0
WAIT	Wait for Condition	--	--	X	X	Prog. Flow	<a_><!>WAIT<op>= <a_><!>WAIT<op>.<i>=	<op> = operand = binary state <i> = selected bit	<op>: AS, ASX, IN : 1 or 0 <i>: 1 - 32 (varies by operand)	N/A
XONOFF	<input checked="" type="checkbox"/> XON/XOFF Enable	X	X	X	X	Comm. I/F	<a_><!>XONOFF	enable bit	0 (disable), 1 (enable)	1

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