

| Parameter | Description | Default | R/W | Saved |
|-----------|---|---------|-----|-------|
| ACCEL | Acceleration (Q8.8 cts/ms/ms) | 2048 | R/W | Yes |
| ADDR | Address to peek/poke | 0 | R/W | No |
| ANA0 | Analog input (pin 4:0-3V, 3:Gnd) | NONE | R/- | No |
| ANA1 | Analog input (pin 2:0-3V, 3:Gnd) | NONE | R/- | No |
| BAUD | Baud rate/100. 96=9600 bps | 9600 | R/W | No |
| CMD | For commands w/o values: RESET,HOME,KEEP,PAS | NONE | -/W | No |
| CT | 32-Bit Close Target | 30000 | R/W | Yes |
| CT2 | 32-Bit Close Target | NONE | -/- | No |
| CTS | 32-Bit Counts per revolution | 4096 | R/W | Yes |
| CTS2 | 32-Bit Counts per revolution | NONE | R/W | No |
| DEF | Default command for CAN | NONE | -/W | No |
| DIG0 | Dig I/O: -1=In,0=Lo,1=Hi,2-100=%PWM (pin 41:0-3.3V) | 0 | R/W | No |
| DIG1 | Dig I/O: -1=In,0=Lo,1=Hi (pin 43:0-3.3V, 44:Gnd) | 0 | R/W | No |
| DP | 32-Bit Default Position | 0 | R/W | Yes |
| DP2 | 32-Bit Default Position | NONE | -/- | No |
| DS | Default step | 25000 | R/W | Yes |
| E | 32-Bit Endpoint | 0 | R/W | No |
| E2 | 32-Bit Endpoint | NONE | -/- | No |
| ECMAX | Encoder correction max value | 0 | R/W | No |
| ECMIN | Encoder correction min value | 0 | R/W | No |
| EN | Enable bitfield | NONE | R/W | No |
| ERROR | Error (tbd) | NONE | R/- | No |
| FET0 | Tensioner output: 0=Off, 1=On | 0 | R/W | No |
| FET1 | Brake output: 0=Off, 1=On | 0 | R/W | No |
| FIND | Find command for CAN | NONE | -/W | No |
| GRPA | Comm group A | NONE | R/W | Yes |
| GRPB | Comm group B | NONE | R/W | Yes |
| GRPC | Comm group C | NONE | R/W | Yes |
| HALLH | 32-Bit Hall history bitfield | 0 | R/W | No |
| HALLH2 | 32-Bit Hall history bitfield | NONE | -/- | No |
| HALLS | Hall feedback bitfield: CBA | NONE | R/W | No |
| HOLD | Flag to hold position after move | 0 | R/W | Yes |
| HSG | High strain gage (tbd) | 255 | R/W | Yes |
| ID | CANbus ID | NONE | R/W | Yes |
| IKCOR | Current sense correction factor | 1638 | R/W | Yes |
| IKI | Current sense integral gain | 3276 | R/W | Yes |
| IKP | Current sense proportional gain | 8192 | R/W | Yes |
| ILOGIC | Logic current (tbd) | NONE | R/- | No |
| IMOTOR | Motor current (2048+205/1A) | NONE | R/- | No |
| IOFF | Initialization offset | NONE | R/W | Yes |
| IOFF2 | Initialization offset | NONE | -/- | No |
| IOFST | Current offset calibration | NONE | R/W | Yes |
| IPNM | CommandedCurrent / Nm (ratio) | 2755 | R/W | Yes |
| IVEL | Initialization velocity (tbd) | 20 | R/W | Yes |
| JIDX | Joint index | NONE | R/W | Yes |
| KD | Differential gain | 8000 | R/W | Yes |
| KI | Integral gain | 0 | R/W | Yes |
| KP | Proportional gain | 2000 | R/W | Yes |
| LCTC | Loop control torque coefficient | 1 | R/W | No |
| LCVC | Loop control velocity coefficient | 1 | R/W | No |
| LFLAGS | Loop feedback flags | 0 | R/W | No |
| LOAD | Load command for CAN | NONE | -/W | No |
| LOCK | Lock | 0 | -/W | No |
| LSG | Low strain gage (tbd) | 0 | R/W | Yes |
| M | 32-Bit Move command for CAN | NONE | -/W | No |
| M2 | 32-Bit Move command for CAN | NONE | -/- | No |
| MCV | Max close velocity (cts/ms) | 1500 | R/W | Yes |
| MDS | Max duty sum for power limiting (tbd) | 1650 | R/W | Yes |
| MECH | 32-Bit Mechanical angle (cts) | NONE | R/- | No |
| MECH2 | 32-Bit Mechanical angle (cts) | NONE | -/- | No |
| MODE | Mode: 0=Idle, 2=Torque, 3=PID, 4=Vel, 5=Trap | 0 | R/W | No |
| MOFST | Mechanical offset calibration | NONE | R/W | Yes |
| MOV | Max open velocity (cts/ms) | 1500 | R/W | Yes |
| MPE | Max position error (tbd) | 5 | R/W | Yes |
| MT | Max torque | 4700 | R/W | Yes |
| MV | Max velocity (cts/ms) | 1500 | R/W | Yes |
| OD | Odometer (tbd) | NONE | R/W | Yes |
| OT | 32-Bit Open Target | 0 | R/W | Yes |
| OT2 | 32-Bit Open Target | NONE | -/- | No |
| OTEMP | Over temperature alarm (tbd) | 82 | R/W | No |
| P | 32-Bit Position. R=Act, W=Cmd | NONE | R/W | Yes |
| P2 | 32-Bit Position. R=Act, W=Cmd | NONE | -/- | No |
| PIDX | Puck index for torque | NONE | R/W | Yes |
| POLES | Number of magnets on rotor | 6 | R/W | Yes |
| PTEMP | Peak temperature recorded (tbd) | NONE | R/W | Yes |
| ROLE | P=PRODUCT, R=ROLE: XXXX PPPP XXXX RRRR | NONE | R/W | Yes |
| SAVE | Save command for CAN | NONE | -/W | No |
| SG | Strain gage (tbd) | NONE | R/- | No |
| SN | Serial number | NONE | R/W | Yes |
| STAT | Status: 0=Reset/Monitor, 2=Ready/Main | NONE | R/W | No |
| T | Torque command | 0 | R/W | No |
| TEMP | Temperature (puck internal) | NONE | R/- | No |
| TENSO | Tension offset (tbd) | NONE | R/W | Yes |
| TENST | Tension total (tbd) | NONE | R/W | Yes |
| THERM | Thermistor (motor) temperature | NONE | R/- | No |
| TIE | Flag to tie inner and outer links | 0 | R/W | Yes |
| TSTOP | Time until considered stopped | 1000 | R/W | Yes |
| UPSECS | Up seconds in operation (tbd) | NONE | R/W | Yes |
| V | Velocity (cts/ms). R=Act, W=Cmd | 0 | R/W | No |
| VALUE | Value to poke/peek | NONE | R/W | No |
| VBUS | Bus voltage (V) | NONE | R/- | No |
| VERS | Firmware version | NONE | R/W | No |
| VLOGIC | Logic voltage (tbd) | NONE | R/- | No |
| X0 | Gimbals offset 1 (Q4.12 rad) | NONE | R/W | Yes |
| X1 | Gimbals offset 2 (Q4.12 rad) | NONE | R/W | Yes |
| X2 | Gimbals offset 3 (Q4.12 rad) | NONE | R/W | Yes |
| X3 | Gimbals/safety gain 1 (Q4.12 rad/3V) | NONE | R/W | Yes |
| X4 | Gimbals/safety gain 2 (Q4.12 rad/3V) | NONE | R/W | Yes |
| X5 | Gimbals/safety gain 3 (Q4.12 rad/3V) | NONE | R/W | Yes |
| X6 | tbd | NONE | R/W | Yes |
| X7 | tbd | NONE | R/W | Yes |

| Key Parameter | |
|---------------|--------|
| 0 | VERS |
| 1 | ROLE |
| 2 | SN |
| 3 | ID |
| 4 | ERROR |
| 5 | STAT |
| 6 | ADDR |
| 7 | VALUE |
| 8 | MODE |
| 9 | TEMP |
| 10 | PTEMP |
| 11 | OTEMP |
| 12 | BAUD |
| 13 | LOCK |
| 14 | DIG0 |
| 15 | DIG1 |
| 16 | FET0 |
| 17 | FET1 |
| 18 | ANA0 |
| 19 | ANA1 |
| 20 | THERM |
| 21 | VBUS |
| 22 | IMOTOR |
| 23 | VLOGIC |
| 24 | ILOGIC |
| 25 | SG |
| 26 | GRPA |
| 27 | GRPB |
| 28 | GRPC |
| 29 | CMD |
| 30 | SAVE |
| 31 | LOAD |
| 32 | DEF |
| 33 | FIND |
| 34 | X0 |
| 35 | X1 |
| 36 | X2 |
| 37 | X3 |
| 38 | X4 |
| 39 | X5 |
| 40 | X6 |
| 41 | X7 |
| 42 | T |
| 43 | MT |
| 44 | V |
| 45 | MV |
| 46 | MCV |
| 47 | MOV |
| 48 | P |
| 49 | P2 |
| 50 | DP |
| 51 | DP2 |
| 52 | E |
| 53 | E2 |
| 54 | OT |
| 55 | OT2 |
| 56 | CT |
| 57 | CT2 |
| 58 | M |
| 59 | M2 |
| 60 | DS |
| 61 | MOFST |
| 62 | IOFST |
| 63 | UPSECS |
| 64 | OD |
| 65 | MDS |
| 66 | MECH |
| 67 | MECH2 |
| 68 | CTS |
| 69 | CTS2 |
| 70 | PIDX |
| 71 | HSG |
| 72 | LSG |
| 73 | IVEL |
| 74 | IOFF |
| 75 | IOFF2 |
| 76 | MPE |
| 77 | EN |
| 78 | TSTOP |
| 79 | KP |
| 80 | KD |
| 81 | KI |
| 82 | ACCEL |
| 83 | TENST |
| 84 | TENSO |
| 85 | JIDX |
| 86 | IPNM |
| 87 | HALLS |
| 88 | HALLH |
| 89 | HALLH2 |
| 90 | POLES |
| 91 | IKP |
| 92 | IKI |
| 93 | IKCOR |
| 94 | HOLD |
| 95 | TIE |
| 96 | ECMAX |
| 97 | ECMIN |
| 98 | LFLAGS |
| 99 | LCTC |
| 100 | LCVC |