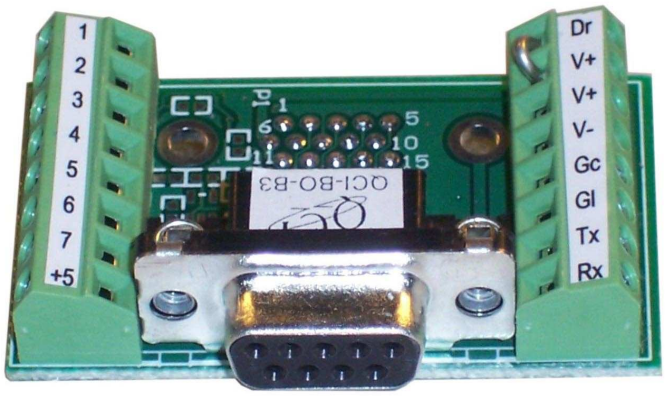
QCI-BO-B3 Basic Breakout Module



Basic Breakout 3 Connected to SilverNugget N3

Product Overview

QCI-BO-B3 is an inexpensive way to breakout the SilverLode Multifunction Interface (SMI) port on the SilverNugget N3 servo controller/driver. The SMI port includes power, communication and I/O.

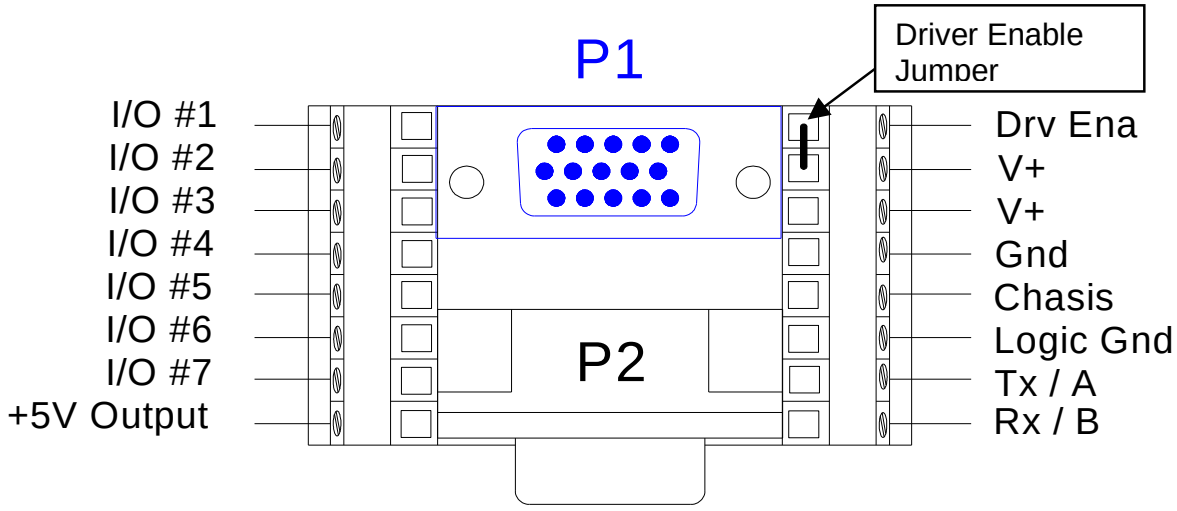
The provided screws lock the breakout to the SMI port (DB15HD (Socket)). There are two terminal blocks that breakout the SMI port's 15 pins. A DB-9 (Socket) connector is provided to connect to a standard PC communications (RS-232) port via a straight (pin to pin) D9 cable (QCI-C-D9F9M-6).

The factory ships the QCI-B0-B3 with a Driver Enable jumper from V+ to Drv Ena. Remove this jumper to separately control the Driver Enable line.

Terminal Connector Wire Range: 16-28 AWG

SMI Port Pin-Out Descriptions

SMI Port (P1)									
1	Driver Enable 10-48VDC	**4**	I/O #3	**7**	V+ Processor 12-48 VDC	**10**	I/O #5	**13**	I/O #1
2	RS-485 A/ RS-232 Tx	**5**	I/O #6	**8**	Logic Gnd	**11**	Processor. Gnd	**14**	I/O #4
3	+5V Output @100 mA	**6**	Processor Gnd	**9**	I/O #2	**12**	RS-485 B/ RS-232 Rx	**15**	I/O #7



DB9 Port (P2)									
1		**3**	RS-485 B/ RS-232 Rx	**5**	Logic Gnd	**7**		**9**	
2	RS-485 A/ RS232 Tx	**4**		**6**		**8**			

How to Use

The Basic Breakout 3 connects directly onto the SilverNugget N3 SMI Port (DB15HD connector). The SilverNugget N3 has separate driver and processor power, allowing for the use of more than one power supply. In addition to driver power, driver enable requires +10 to VDC to active the servo's driver circuitry.

The diagram below shows a typical setup using a Basic Breakout 3 with a SilverNugget N3 and clamp module.

When using more than one power supply, connect the grounds of the power supplies together.

For more details on using the SilverNugget N3, see datasheet QCI-DS006.