## Basic Breakout with 24V 5 In, 2 Out - QCI-BO-B52



QCI-BO-B52

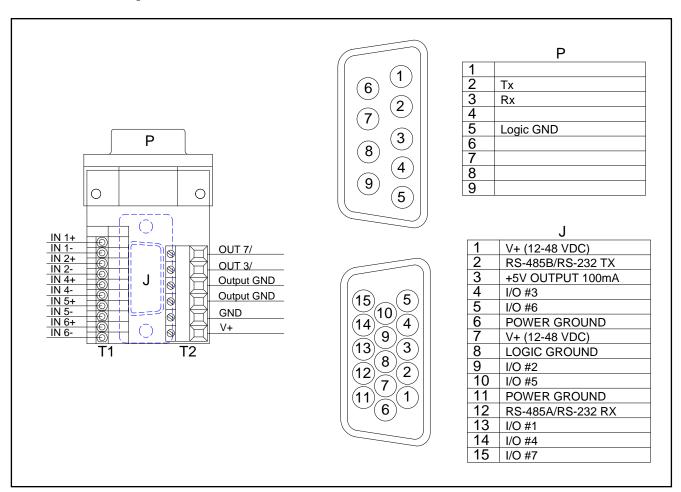
### **Product Overview**

The QCI-BO-B52 is a breakout module with 5 isolated 24v inputs and 2 non-isolated 24v outputs. The outputs are open drains rated for 24 volts power supply, 1A. The B52 breakout connects to the following controller/drivers via the SMI Port:

SilverDust MG (QCI-DS-004) SilverNugget N2 (QCI-DS005) SilverDust IG8 (QCI-DS018) SilverDust IG (QCI-DS019) SilverDust IGF (QCI-DS021)

Note: the QCI-BO-B52 does not connect to the SilverDust IGB.

## **Electrical Specifications**



# Technical Document:QCI-TD046 QuickSilver Controls, Inc.

There are five isolated input pairs labeled IN1, IN2, IN3, IN4, IN5 which drive SMI port (J) inputs IO1, IO2, IO4, IO5, and IO6 respectivley. A 10 to 30v signal into the input causes the respective IO to be driven LOW. In the absence of an input, these IO are passively pulled HIGH.

There are two non-isolated open drain outputs OUT3 and OUT7, controlled by IO3 and IO7. A high level on IO3 or IO7 causes the respective output to become active (drive to 0v).

#### **Isolated Inputs**

0 to 30 VDC (Recommended for 24V operation) 0-1V: Input is LOW, producing logic HI at respective IO. Input current is approximately 1mA at 10v input, 3mA at 30v input. 10V-30V: Input HIGH produces logic LOW at respective IO

**NOTE:** Inputs are NOT sensitive to polarity of input (inputs are reversible).

#### **Output Current**

Sinking Only (Set IO HIGH to turn ON output FET – Pulls output low; Set IO LOW to turn OFF FET – Output floats).

Up to 1.0 amps per channel continuously. If the load draws more than the specified current, the I/O Driver is designed to go into current/thermal limit mode causing the FET to turn off.

#### I/O Over-Voltage Protection

Each output line will clamp at approximately 40 volts. Applying more than 40 volts may permanently damage the output lines.

Terminal Connector Wire Range: 16-28 AWG

### **Typical Wiring Diagram**

