## 10-pin IDC Ribbon Cable - QCI-C-CC10-nn \& QCI-C-TCC10-nn

The 10 -pin IDC ribbon cable simplifies SilverMax X -series data bus communication wiring by allowing multiple SilverMax X-series breakout boards, QCI-BO-X1, to be daisy-chain via a single IDC ribbon cable. The 10-pin IDC ribbon cable ties both RS-485 \& CAN data busses across multiple SilverMax X -series breakout boards via their respective P 4 headers.
The QCI-BO-X1 breakout board provide RS-485 bus termination via jumpers P6, P7 and P8, and CAN bus termination via jumper P5. Although very short RS-485 busses (up to a couple of meters) may work adequately without termination, standard runs and even short runs in noisy environments should be terminated at each end of network. For the CAN bus, termination is not optional.

## 2 Axis Setup



## 3 Axis Setup



Two ribbon cable options are offered, standard and twisted pair. For short cable runs between breakouts, the standard ribbon cable is acceptable. For longer cable runs or when near noisy environments, the twisted ribbon cable is recommended.

The standard 10 -pin IDC ribbon cable is available in any custom length and with as many 10 -pin IDC connectors required by application. The standard 10 -pin IDC ribbon cable part number is QCI-C-CC10-nn, where -nn specifies distance(s), in inches, between IDC connectors. At a minimum, two $10-\mathrm{pin}$ IDC connectors are required to daisy RS-485 \& CAN busses. For example, QCI-C-CC10-06, is a standard IDC ribbon cable with two 10-pin IDC connectors, 6 inches apart.

To order IDC ribbon cables with additional IDC connectors, determine distance to the next IDC connector, and add this distance to the end of the part number. For example, to order a three 10-pin standard IDC connector cable with 6 inches between IDC connectors, the part number would be, QCI-C-CC10-06-06. Note, for standard IDC ribbon cable, distances between IDC connectors don't need to be identical, distances between connectors can be different, i.e., QCI-C-CC10-12-06.

To callout the twisted pair IDC ribbon cable option use part number, QCI-C-TCC10-nn, where -nn also specifies distance(s) between IDC connectors. Please note that the twisted pair ribbon cable includes flats every 18 inches to allow for IDC connectors installations, and for this reason, the twisted pair IDC ribbon cable is only available in increments of 18 inches between IDC connectors. For example, to order a three 10 -pin twisted pair IDC ribbon cable with 18 inches between connectors, the part number would be, QCI-C-TCC10-18-18.

