

IsoPod™ V3 Addendum

This addendum contains data on the IsoPod™ V3 hardware changes, and how they differ from the V2 hardware configuration.

This addendum supplements, and should be used in conjunction with, the IsoPod™ Users Manual. **Part 1** of this document covers the new hardware add-ons that are unavailable with the version 2, while **Part 2** covers how some of the present hardware features in the version 2 have changed in version 3.

These hardware changes will NOT affect your software development. All mounting holes, connectors, and its mechanicals are unchanged.

Part 1 - Add-Ons

- On SCI1, both Serial RS-232 and TTL signals are now brought out to J4 by default.
- Added two Ground pins on J7. On V2, these two pins are No Connection.
- Modified the circuit and replaced the 5V CAN transceiver, TJA1050 for the 3.3V part # SN65HVD230. *Note: this replacement will not change the CAN input and output functionalities, nor affect your software development.*
- Resistors RA, RB, RC, RD are added to allow easy configuration change from RS-232/TTL to RS-422/485 without any physical trace cuts required.

Part 2 - Hardware Feature Changes

All changed signals are highlight below,

J4 – CAN Bus & Serial SCI1 w/RS-232 & TTL configuration

J4(V2)					J4(V3)				
SOUT1	SIN1	GND	N.C.	N.C.	SOUT1	SIN1	GND	RXD1	TXD1
9	7	5	3	1	9	7	5	3	1
10	8	6	4	2	10	8	6	4	2
CANH	GND	CANL	GND	+5V	CANH	GND	CANL	GND	+5V

SIN1 & SOUT1 : Serial Input & Output RS-232 signals

RxD1 & TxD1: Serial Input & Output TTL signals

CANH: CAN High bus output

CANL: CAN Low bus output

For RS-232 & TTL configuration, resistors, RA, RB, RC, RD are installed.

J4 – CAN Bus & Serial SCI1 w/RS-422/485 pinouts are UNCHANGED

J4(V2)					J4(V3)				
+RCV	-RCV	GND	-XMT	+XMT	+RCV	-RCV	GND	-XMT	+XMT
9	7	5	3	1	9	7	5	3	1
10	8	6	4	2	10	8	6	4	2
CANH	GND	CANL	GND	+5V	CANH	GND	CANL	GND	+5V

+XMT : RS-422 Transmitter, high signal

-XMT : RS-422 Transmitter, low signal

+RCV : RS-422/485 Receiver/Transceiver, high signal

-RCV : RS-422/485 Receiver/Transceiver, low signal

CANH: CAN High bus output

CANL: CAN Low bus output

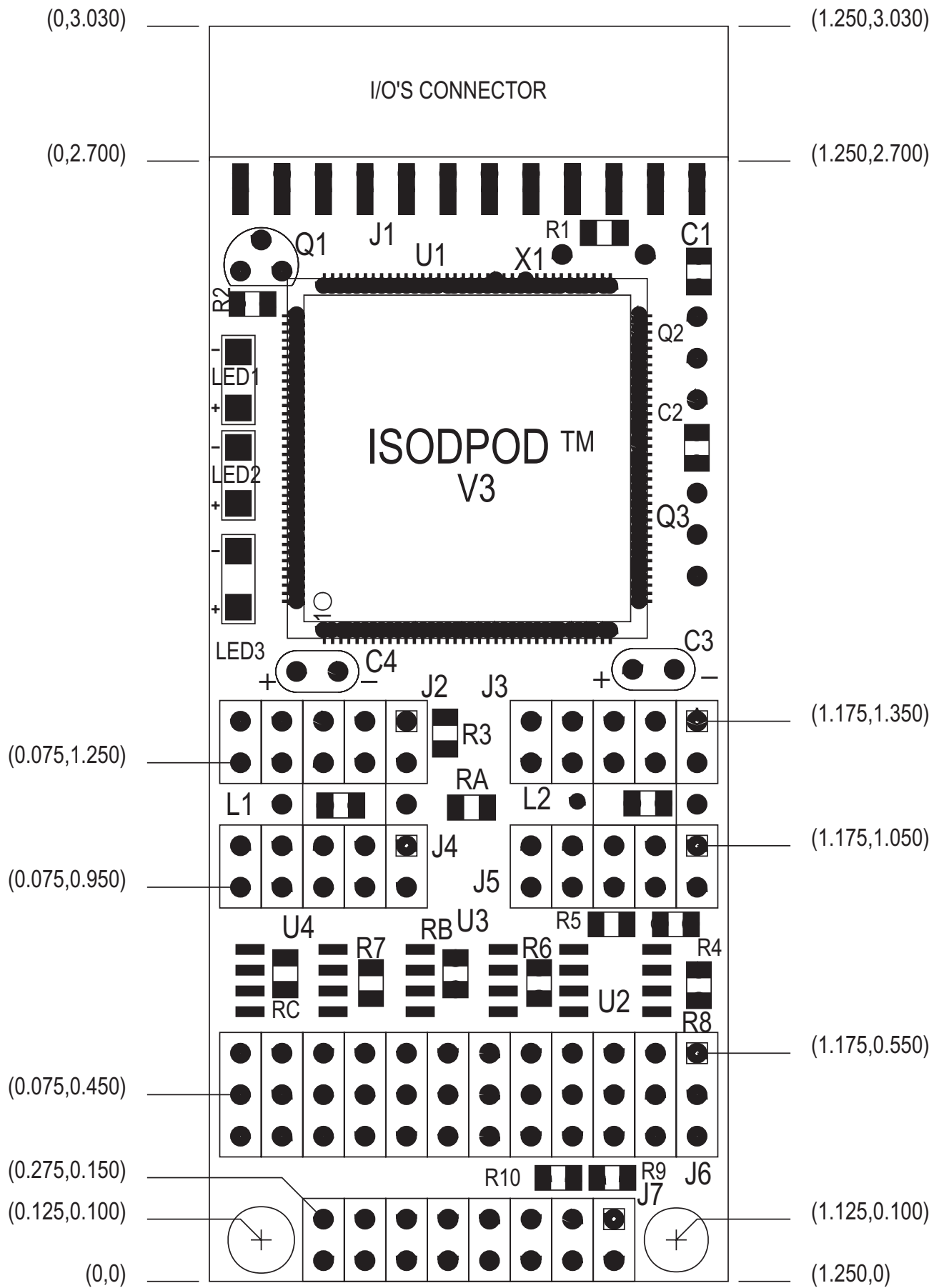
For RS-422/485 configuration, resistors RA, RB, RC, RD are removed. Resistor R14 is installed, U3 and U4 are installed with Max3483 IC's.

J7 – Various Digital Inputs Connector

J7(V2)			
FAULTA0	1	2	N.C.
FAULTA1	3	4	ISA0
FAULTA2	5	6	ISA1
FAULTA3	7	8	ISA2
FAULTB0	9	10	ISB0
FAULTB1	11	12	ISB1
FAULTB2	13	14	ISB2
FAULTB3	15	16	N.C.

J7(V3)			
FAULTA0	1	2	GND
FAULTA1	3	4	ISA0
FAULTA2	5	6	ISA1
FAULTA3	7	8	ISA2
FAULTB0	9	10	ISB0
FAULTB1	11	12	ISB1
FAULTB2	13	14	ISB2
FAULTB3	15	16	GND

Schematic & Mechanical Drawing (available on PDF format only)



Dimension in Inches

