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**XM-1553**  
**MIL-STD-1553 Transition Module**  
**User Manual**

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**XM-1553**  
**MIL-STD-1553 Transition Module**

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# Introduction

The XM-1553 is a passive transition module that provides connection from a HD50 connector to two concentric triax receptacle connectors compatible with a dual-redundant MIL-STD-1553B bus. For convenience, the XM-1553 may be mounted in a 3U VME slot. Connection is made to the MIL-STD-1553 controller board I/O via a 50-pin ribbon cable.

Features of the XM-1553 versions prior to Rev. C included test points for: OUTX\_A, OUTY\_A, OUTX\_B, OUTY\_B, GND and INCMD. The Rev C XM-1553 retains these features plus adds: a test point for XTRIG (E7), an RT address jumper block (E8), a connector for In Circuit Programmable (ISP) devices (J2), and shunt selection of for the OUTX/Y\_A and OUTX/Y\_B signals (E9-12). The original XM-1553 was intended to be used with the IP-1553 products, while the Rev C XM-1553 may be used with both the IP-1553 and the P1-1553 products.

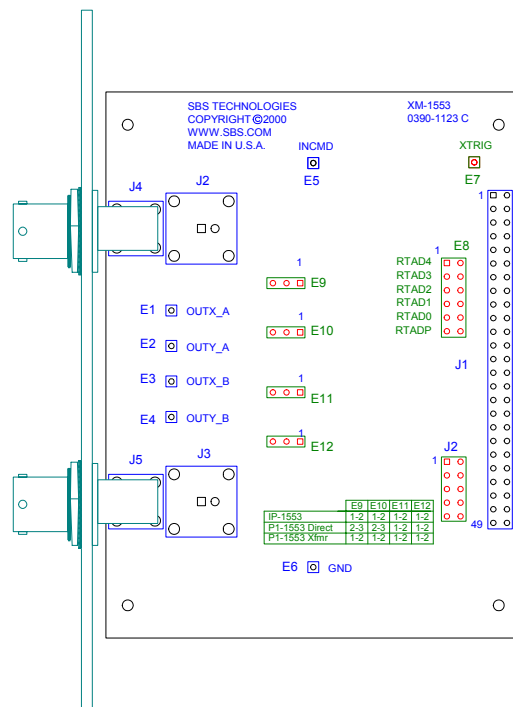


Figure 1. XM-1553 Assembly

## 1553 Output Shunt Settings

For use with the IP-1553, E9-E12 should have shunts in the pin 1 to pin 2 position (transformer coupled or direct coupled selection is made on the IP-1553). For the P1-1553, E9-E12 should be in the pin 1 to pin 2 position for transformer coupled (long stub) interfacing and pin 2 to pin 3 for direct coupled (short stub interfacing).

## RT Address Selection

The Remote Terminal (RT) Address may be set externally to the 1553 controller by the setting shunts on E8. The 1553 controller board must be set for external address selection. An installed shunt causes a low in that address or parity position.

## I/O Connector (J1) Pin Assignment

The following table shows the Pin Assignment of the P1-1553 I/O when inserted in an MC-101 carrier.

<b>XM-1553 J1</b>	<b>Signal</b>	<b>XM-1553 J1</b>	<b>Signal</b>
1	GND	2	XTRIG
3	GND	4	N/C
5	GND	6	N/C
7	GND	8	N/C
9	GND	10	IN_CMD
11	GND	12	RTA4
13	GND	14	RTA3
15	GND	16	RTA2
17	GND	18	RTA1
19	GND	20	RTA0
21	GND	22	RTAP
23	GND	24	N/C
25	GND	26	N/C
27	CHA_XFMR_P	28	CHA_DRCT_P
29	CHA_XFMR_N	30	CHA_DRCT_N
31	N/C	32	N/C
33	CHB_XFMR_P	34	CHB_DRCT_P
35	CHB_XFMR_N	36	CHB_DRCT_N
37	N/C	38	N/C
39	N/C	40	N/C
41	*PLD_TCK	42	*PLD_GND
43	*PLD_TDO	44	*PLD_5V
45	*PLD_TMS	46	*PLD_N/C
47	*PLC_N/C	48	*PLD_N/C
49	*PLD_TDI	50	*PLC_GND

\* Reserved for manufacturing purposes, must be left open.

**Figure 2. XM-1553 50 pin I/O Connector (J1) Pin Assignment**

# Repair

## Service Policy

Before returning a product for repair, verify as soon as possible that the suspected unit is at fault; then call the Customer Service Department for a RETURN MATERIAL AUTHORIZATION (RMA) number. Carefully package the unit, in the original shipping carton if it is available, and ship prepaid and insured with the RMA number clearly written on the outside of the package. Include the return address and telephone number of a technical contact. For out-of-warranty repairs, a purchase order for repair charges must accompany the return. SBS Technologies, Inc. will not be responsible for damages due to improper packaging of returned items. For service of SBS Technologies products not purchased directly from SBS Technologies, contact your reseller. Products returned to SBS Technologies for repair by other than the original customer will be treated as out-of-warranty.





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