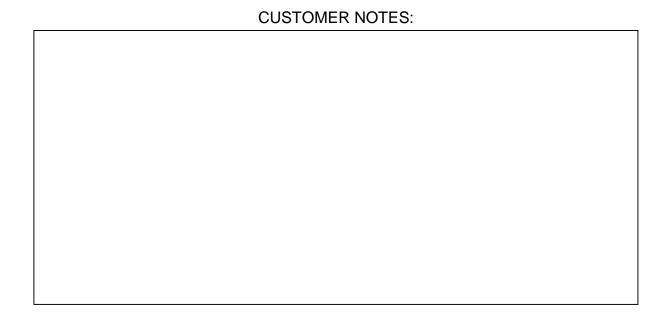


Hardware Manual for PCCARD-A429



Part Number: 15541-00000-A1 Cage Code: 4RK27 • NAICS: 334418

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Revision Control History

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PCCARD Connector

PCCARD Connector Pin-outs

Table 2. J1- 68-pin Connector

J1	Signal	Cable Color	J1	Signal	Cable Color
Pin#	DV4 /TV4	Code(Solid/Band)	Pin#	N//0	Code(Solid/Band)
1	RX1+/TX1+	Black/Red	35	N/C	N/C
2	RX1-/TX1-	Red/Black	36	N/C	N/C
3	RX2+/TX2+	Black/White	37	N/C	N/C
4	RX2-/TX2-	White/Black	38	N/C	N/C
5	RX3+/TX3+	Black/Green	39	N/C	N/C
6	RX3-/TX3-	Green/Black	40	N/C	N/C
7	RX4+/TX4+	Black/Blue	41	N/C	N/C
8	RX4-/TX4-	Blue/Black	42	N/C	N/C
9	RX5+	Black/Yellow	43	N/C	N/C
10	RX5-	Yellow/Black	44	N/C	N/C
11	RX6+	Black/Brown	45	N/C	N/C
12	RX6-	Brown/Black	46	N/C	N/C
13	RX7+	Black/Orange	47	N/C	N/C
14	RX7-	Orange/Black	48	N/C	N/C
15	RX8+	Red/White	49	N/C	N/C
16	RX8-	White/Red	50	N/C	N/C
17	GND	Green/Red	51	N/C	N/C
18	~AutoTest	N/C	52	Discrete 1	Green/Blue
19	TRIG_IN1	Red/Green	53	N/C	N/C
20	TRIG_OUT1	Red/Blue	54	Discrete 2	Blue/Green
21	GND	Blue/Red	55	N/C	N/C
22	RS-485_1+	Red/Yellow	56	N/C	N/C
23	RS-485_1-	Yellow/Red	57	N/C	N/C
24	RS-485_2+	Red/Brown	58	N/C	N/C
25	RS-485_2-	Brown/Red	59	N/C	N/C
26	EXT TTL IO	Red/Orange	60	N/C	N/C
27	GND	Orange/Red	61	N/C	N/C
28	IRIG In	Green/White	62	N/C	N/C
29	IRIG GND	White/Green	63	N/C	N/C
30	JTAG PWR	N/C	64	N/C	N/C
31	JTAG CLK	N/C	65	N/C	N/C
32	JTAG TMS	N/C	66	N/C	N/C
33	JTAG TDI	N/C	67	N/C	N/C
34	JTAG TDO	N/C	68	N/C	N/C

PCCARD Connector Info

Figure 1. PCCARD-A429 Connector Facing the Card



PCCARD Connector

Backshell: #191-000002-010 Honda Connector: #HDRA-68BA

Arinc-717 Operation

TX Operation

When a channel is set to transmit in Harvard Bi-Phase mode, this forces a TX channel pair (channels 1&2 and 3&4 pairs) to differentially drive the 0-5V positive leg of the ARINC-429 drivers. The odd channel is the positive differential signal and the even channel leg is the negative differential signal used to create the Harvard Bi-Phase 717 encoding. This setting is provided for older ARINC-717 DFDRS systems. This setting ONLY applies to the first four TX channels.

Table 3. TX Connections for ARINC-717 operation

J1 Pin#	Signal	Cable Color Code(Solid/Band)
1	A717 TX1+	Black/Red
2	N/C	N/C
3	A717 TX1-	Black/White
4	N/C	N/C
5	A717 TX2+	Black/Green
6	N/C	N/C
7	A717 TX2-	Black/Blue
8	N/C	N/C

RX Operation

When a channel is set to receive in Harvard Bi-Phase mode, the same connector inputs are used as when operating in standard ARINC-A429 mode. This ONLY applies to the first two RX channels. See the ARINC (RX & TX) Protocol Engine Specifications-Users Manual more for information on setting the channel to operate in Harvard bi-phase mode.