16-Channel Serial I/O Cable Assembly

C²I² Systems manufactures and sells a family of Serial I/O Adapters and Boards in the PMC, PCI-104, PCI and cPCI formfactors. Certain versions of these adapters employ front panel I/O.

In such cases, a cable is required to provide physical access to the serial I/O signals available on the front panel connector of these serial I/O adapters and the corresponding serial data terminal equipment.

Figure 1 : Serial I/O Cable Assembly

The I/O cable assembly consists of a 160-pin Molex connector (Part No. 71624-3000) on the adapter side which branches out into 16 cables of nominally 2,0 m in length with male DE-9 connectors on the terminal equipment side.

The cable is configured with :
Channels 1 to 8 :   RS-232 DE-9 Male,
Channels 9 to 16 :   RS-232 and RS-422 DE-9 Male

Part Number	Grade	Length
CCII/LCP/50-CCM/020/IND	Industrial	2,0 m

Other cable configurations on request.
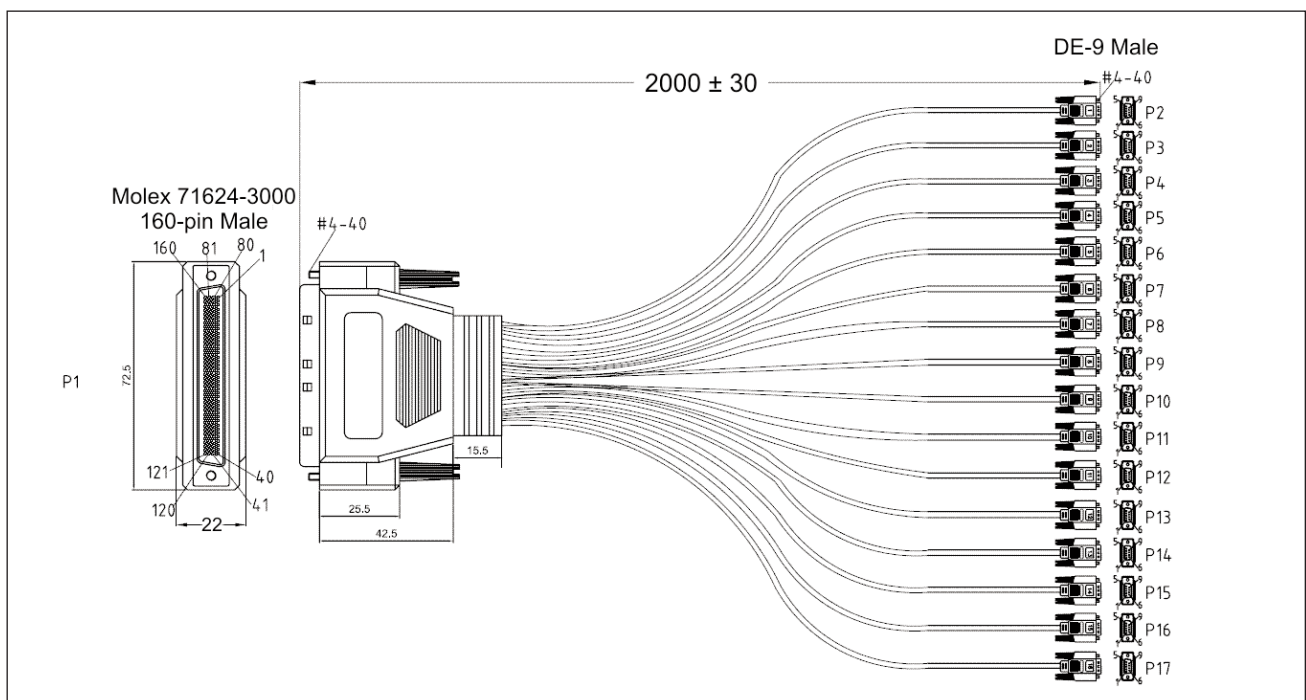
Figure 2 : Diagram of the Cable Assembly

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Board-Level **16-Channel Serial I/O Cable Assembly**

Pin No.	Connector J1 Signal Name	Pin No.	DE-9 Connector Signal Name	Pin No.	Connector J1 Signal Name	Pin No.	DE-9 Connector Signal Name
Channel 1 (RS-232 only)				**Channel 5 (RS-232 only)**			
133	CD	1	Carrier Detect	135	CD	1	Carrier Detect
147	RxD	2	Received Data	150	RxD	2	Received Data
148	TxD	3	Transmitted Data	149	TxD	3	Transmitted Data
140	DTR	4	Data Terminal Ready	141	DTR	4	Data Terminal Ready
128	GND	5	Ground	126	GND	5	Ground
139	DSR	6	Data Set Ready	142	DSR	6	Data Set Ready
146	RTS	7	Request To Send	151	RTS	7	Request To Send
145	CTS	8	Clear To Send	152	CTS	8	Clear To Send
136	RI	9	Ring Indicator	134	RI	9	Ring Indicator
Channel 2 (RS-232 only)				**Channel 6 (RS-232 only)**			
130	CD	1	Carrier Detect	132	CD	1	Carrier Detect
155	RxD	2	Received Data	158	RxD	2	Received Data
156	TxD	3	Transmitted Data	157	TxD	3	Transmitted Data
138	DTR	4	Data Terminal Ready	143	DTR	4	Data Terminal Ready
127	GND	5	Ground	125	GND	5	Ground
137	DSR	6	Data Set Ready	144	DSR	6	Data Set Ready
154	RTS	7	Request To Send	159	RTS	7	Request To Send
153	CTS	8	Clear To Send	160	CTS	8	Clear To Send
131	RI	9	Ring Indicator	129	RI	9	Ring Indicator
Channel 3 (RS-232 only)				**Channel 7 (RS-232 only)**			
89	CD	1	Carrier Detect	91	CD	1	Carrier Detect
118	RxD	2	Received Data	115	RxD	2	Received Data
117	TxD	3	Transmitted Data	116	TxD	3	Transmitted Data
109	DTR	4	Data Terminal Ready	108	DTR	4	Data Terminal Ready
121	GND	5	Ground	124	GND	5	Ground
110	DSR	6	Data Set Ready	107	DSR	6	Data Set Ready
119	RTS	7	Request To Send	114	RTS	7	Request To Send
120	CTS	8	Clear To Send	113	CTS	8	Clear To Send
90	RI	9	Ring Indicator	92	RI	9	Ring Indicator
Channel 4 (RS-232 only)				**Channel 8 (RS-232 only)**			
93	CD	1	Carrier Detect	98	CD	1	Carrier Detect
102	RxD	2	Received Data	99	RxD	2	Received Data
101	TxD	3	Transmitted Data	100	TxD	3	Transmitted Data
111	DTR	4	Data Terminal Ready	106	DTR	4	Data Terminal Ready
122	GND	5	Ground	123	GND	5	Ground
112	DSR	6	Data Set Ready	105	DSR	6	Data Set Ready
103	RTS	7	Request To Send	98	RTS	7	Request To Send
104	CTS	8	Clear To Send	97	CTS	8	Clear To Send
94	RI	9	Ring Indicator	96	RI	9	Ring Indicator

Table 1A : Connector Pinouts

16-Channel Serial I/O Cable Assembly

Board-Level

Pin No.	Connector J1 Signal Name	Pin No.	DE-9 Connector Signal Name	Pin No.	Connector J1 Signal Name	Pin No.	DE-9 Connector Signal Name
Channel 9				**Channel 13**			
RS-422				**RS-422**			
17	TxD+	1	Transmitted Data +	25	TxD+	1	Transmitted Data +
18	TxD-	2	Transmitted Data -	24	TxD-	2	Transmitted Data -
20	RxD+	3	Received Data +	22	RxD+	3	Received Data +
19	RxD-	4	Received Data -	23	RxD-	4	Received Data -
RS-232				**RS-232**			
60	GND	5	Ground	65	GND	5	Ground
56	TxD	6	Transmitted Data	64	TxD	6	Transmitted Data
57	RxD	7	Received Data	63	RxD	7	Received Data
58	RTS	8	Request To Send	62	RTS	8	Request To Send
59	CTS	9	Clear To Send	61	CTS	9	Clear To Send
Channel 10				**Channel 14**			
RS-422				**RS-422**			
12	TxD+	1	Transmitted Data +	30	TxD+	1	Transmitted Data +
13	TxD-	2	Transmitted Data -	29	TxD-	2	Transmitted Data -
15	RxD+	3	Received Data +	27	RxD+	3	Received Data +
14	RxD-	4	Received Data -	28	RxD-	4	Received Data -
RS-232				**RS-232**			
55	GND	5	Ground	70	GND	5	Ground
51	TxD	6	Transmitted Data	69	TxD	6	Transmitted Data
52	RxD	7	Received Data	68	RxD	7	Received Data
53	RTS	8	Request To Send	67	RTS	8	Request To Send
54	CTS	9	Clear To Send	66	CTS	9	Clear To Send
Channel 11				**Channel 15**			
RS-422				**RS-422**			
7	TxD+	1	Transmitted Data +	37	TxD+	1	Transmitted Data +
8	TxD-	2	Transmitted Data -	38	TxD-	2	Transmitted Data -
10	RxD+	3	Received Data +	40	RxD+	3	Received Data +
9	RxD-	4	Received Data -	39	RxD-	4	Received Data -
RS-232				**RS-232**			
45	GND	5	Ground	75	GND	5	Ground
44	TxD	6	Transmitted Data	74	TxD	6	Transmitted Data
42	RxD	7	Received Data	73	RxD	7	Received Data
43	RTS	8	Request To Send	72	RTS	8	Request To Send
41	CTS	9	Clear To Send	71	CTS	9	Clear To Send
Channel 12				**Channel 16**			
RS-422				**RS-422**			
5	TxD+	1	Transmitted Data +	32	TxD+	1	Transmitted Data +
4	TxD-	2	Transmitted Data -	33	TxD-	2	Transmitted Data -
2	RxD+	3	Received Data +	35	RxD+	3	Received Data +
3	RxD-	4	Received Data -	34	RxD-	4	Received Data -
RS-232				**RS-232**			
50	GND	5	Ground	80	GND	5	Ground
49	TxD	6	Transmitted Data	76	TxD	6	Transmitted Data
47	RxD	7	Received Data	77	RxD	7	Received Data
48	RTS	8	Request To Send	78	RTS	8	Request To Send
46	CTS	9	Clear To Send	79	CTS	9	Clear To Send

Table 1B : Connector Pinouts

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Board-Level