



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



RS-232 to SAE J1708 Converter $\text{C}\epsilon$

Model J1708D15



Description

The Model J1708D15 will allow any device with an RS-232 port to communicate with vehicles using the SAE J1708 specification. SAE J1708 is the specification for serial communications between microcomputer systems in heavy-duty vehicle applications.

The J1708D15 converts half-duplex RS-232 transmit and receive data signals to the SAE J1708 differential communications specification. The converter is powered from the vehicle, allowing it to be used with low-power terminal devices. The RS-232 side of the J1708D15 converter is a DB9 female, and is configured as a DCE device. The J1708D15 has a jumper to select priority. Two values can be set: priority one (1.25ms)--which is reserved for immediate access to the bus; and priority 8 (2.5ms)--used to connect service tools to the bus. The J1708D15 is set to priority 1 when shipped.

The Model J1708D15 is connected to the vehicle with cable D6D15M (sold separately) for 6-pin Deutsch, or D9D15M (sold separately) for 9-pin Deutsch connection.

Installation

The RS-232 side of the J1708D15 will connect directly to a computer RS-232 port, or any other DTE RS-232 port. The J1708D15 has a female DB9 and is configured as a DCE RS-232 device. Pinouts for the RS-232 port are given in Table 1 and pinouts for the J1708 side are given in Table 2.

Operation

In addition to converting signal levels to and from the SAEJ1708 specification, the J1708D15 provides timing information through the RS-232 CTS line. The SAEJ1708 specification requires the transmitter to verify that the network idle state continues to exist to within 1/2 bit time prior to transmission. The CTS line on the J1708D15 provides a method for the host software to monitor the network with this resolution. If the network has been idle, the CTS line goes high. Each bit transmitted on the network will cause the CTS line to go low for 1.25ms priority 1 or 2.5 ms priority 8. By checking the CTS line before transmitting the host software can avoid network collisions.

Jumper Setting

The Model J1708D15 provides a simple method of selecting priority. A two-position jumper is located on the bottom of the circuit board. To access the jumper disconnect the device from the vehicle (DB15) and the terminal (DB9). Open the case by inserting a small screwdriver in the notch located along the side of the device and prying the two halves apart. The jumper is clearly marked on the bottom of the circuit board. The jumper connects the center pin to either priority 1 or priority 8. Select the desired priority and close the case.

Table 1. DB9 RS-232 Connection

Female DB9	Function	Direction
1	Connected to pins 4 and 6	
2	Receive data	Output
3	Transmit data	Input
4	Connected to pins 6 and 1	
5	Signal ground	
6	Connected to pins 1 and 4	
7	No connection	
8	CTS	Output
9	No connection	

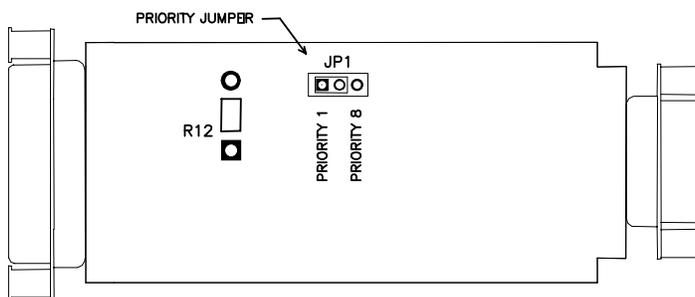


Table 2. DB15 Vehicle Connection

Vehicle Side DB15 Pins	Function	Direction
6	Power -	Input
8	Power +	Input
14	J1708 -	Input/output
15	J1708 +	Input/output

© B&B Electronics -- April 2003

This product designed and manufactured in USA of domestic and imported parts by

B & B Electronics Mfg. Co.

707 Dayton Road - P.O. Box 1040 - Ottawa, IL 61350 USA
 Phone: (815) 433-5100 - Fax: (815) 433-5105

Home Page: www.bb-elec.com

Sales e-mail: orders@bb-elec.com - Fax: (815) 433-5109

Technical Support e-mail: support@bb-elec.com - Fax: (815) 433-5104

B & B Electronics Ltd

Westlink Commercial Park - Oranmore, Co. Galway - Ireland
 Phone: +353 91 792444 - Fax: +353 91 792445

Home Page: www.bb-europe.com

Sales e-mail: orders@bb-europe.com

Technical Support e-mail: support@bb-europe.com

Specifications

Dimensions: 4.25 x 1.7 x .9 in (10.5 x 4.3 x 2.1 cm)
Connectors: RS-232: DB-9 female (DCE)
J1708: DB15 female
Power Requirement: Voltage 12 to 24VDC
Power Consumption: 15mA @ 12VDC
Temperature: 0 to +70°C operating

Models

J1708D15..... RS-232 to J1708 converter
D6D15M 6-pin round connector cable with DB15 male connector, 40 in. (1.0 m)
D9D15M 9-pin round connector cable with DB15 male connector, 40 in. (1.0 m)

DECLARATION OF CONFORMITY	
Manufacturer's Name:	B&B Electronics Manufacturing Company
Manufacturer's Address:	P.O. Box 1040 707 Dayton Road Ottawa, IL 61350 USA
Model Numbers:	J1708D15
Description:	PDA to SAE J1708 Converter
Type:	Light industrial equipment
Application of Council Directive:	89/336/EEC
Standards:	EN 50082-1: 1998 EN 61000 (-4-2, -4-3, -4-4, -4-6, -4-8) ENV 50204
	
William H. Franklin III, Director of Engineering	
	

© B&B Electronics -- April 2003

This product designed and manufactured in USA of domestic and imported parts by

B & B Electronics Mfg. Co.

707 Dayton Road - P.O. Box 1040 - Ottawa, IL 61350 USA
Phone: (815) 433-5100 - Fax: (815) 433-5105
Home Page: www.bb-elec.com
Sales e-mail: orders@bb-elec.com - Fax: (815) 433-5109
Technical Support e-mail: support@bb-elec.com - Fax: (815) 433-5104

B & B Electronics Ltd

Westlink Commercial Park - Oranmore, Co. Galway - Ireland
Phone: +353 91 792444 - Fax: +353 91 792445
Home Page: www.bb-europe.com
Sales e-mail: orders@bb-europe.com
Technical Support e-mail: support@bb-europe.com