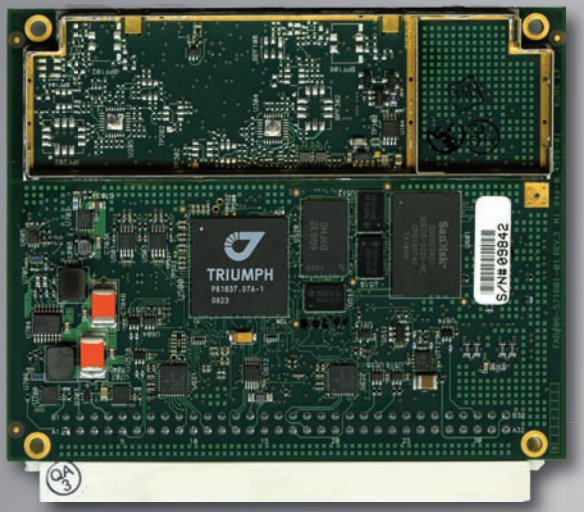
Duo-G2D



For operation manuals and other technical documents please see links below.

To update your receiver now (and frequently later) please visit our website and download the latest firmware.

Here are links to the Duo-G2D firmware, documentation, and utilities:

- Duo-G2D OEM Board Newest Firmware Version
http://www.javad.com/jgnss/support/update.html
- Firmware Loader (Firmware Loading Software) free
http://www.javad.com/jgnss/products/software/firmwareloader.html
- Duo-G2D OEM Board Datasheet
http://www.javad.com/downloads/javadgnss/sheets/Duo-G2D_Data_Sheet.pdf
- Duo-G2D OEM Board Physical Specifications
http://www.javad.com/downloads/javadgnss/sheets/Duo-G2D_DRW.pdf
- TriVU (Windows GUI Configuration Utility) free
http://www.javad.com/jgnss/products/software/trivu.html
- GREIS (GNSS Receiver External Interface Specification)
http://www.javad.com/downloads/javadgnss/manuals/GREIS/GREIS_Reference_Guide.pdf

Option Authorization File

JAVAD GNSS issues an Option Authorization File (OAF) to enable the specific options that customer's purchase.

An OAF allows customers to customize and configure the Duo-G2D OEM Board according to particular needs, thus only purchasing those options needed.

Typically, all Duo-G2D OEM Board receivers ship with a temporary OAF that allows the receiver to be used for a predetermined period of time (typically 60 days). When the receiver is purchased, a new OAF activates purchased options permanently. Receiver options remain intact when clearing the NVRAM or resetting the receiver.

For a complete list of available options and details, consult your dealer, or visit the JAVAD GNSS website

http://www.javad.com/jgnss/products/options/index.html

To load new OAF to receiver use the TriVU software (see link above).

1731 Technology Drive, San Jose, CA 95110 USA
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www.javad.com

Duo-G2D

Support Inquiries

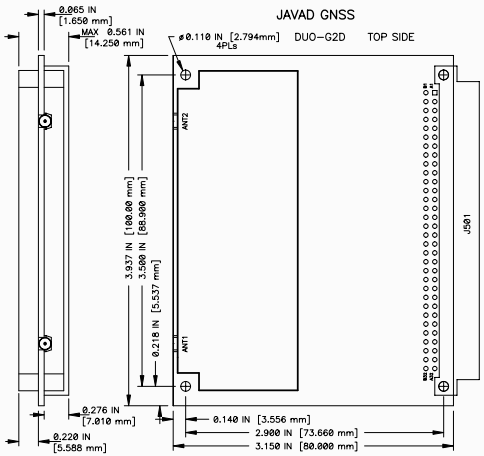
In order to address customer support inquires in a timely and effective manner; JAVAD GNSS has created a powerful online question utility. To take advantage of this utility, please log into your JAVAD GNSS account and select QUESTIONS from the drop down menu.

The questions utility may also be reached by following this link,

http://www.javad.com/cgi-bin/jgnss/cgi?Action=DrawQuestionManager&initFormCurrentSavez=on

When the JAVAD GNSS support team posts a response to your inquiry, an email containing this response is sent to the email address you have registered in your profile.

Description	I/O	Signal Name	Pin #	Pin #	Signal Name	I/O	Description
Power Ground		PGND	**A1**	**B1**	PGND		Power Ground
+4.5 to +40 VDC Power Input	I	PWR_IN	**A2**	**B2**	PWR_IN	I	+4.5 to +40 VDC Power Input
Factory use only, must be left open		FUO	**A3**	**B3**	COMMSW#	I	Active Low Command Input (FN Button) *1
Reserved		-	**A4**	**B4**	KA_PWR	I	Keep-Alive Power input for Real-Time Clock (+4.5 to +40 VDC, 10µA typ)
External LED Control *2	O	LED2_RED	**A5**	**B5**	LED1_RED	O	External LED Control *2
External LED Control *2	O	LED2_GRN	**A6**	**B6**	LED1_GRN	O	External LED Control *2
Signal Ground		GND	**A7**	**B7**	USB_PWR	I	USB port Power Input line
USB port D- line	I/O	USB_D-	**A8**	**B8**	USB_D+	I/O	USB port D+ line
Serial port A TXD line	O	TXDA	**A9**	**B9**	CTSA	I	Serial port A CTS line
Serial port A RXD line	I	RXDA	**A10**	**B10**	RTSA	O	Serial port A RTS line
Serial port C TXD line	O	TXDC	**A11**	**B11**	CTSC	I	Serial port C CTS line
Serial port C RXD line	I	RXDC	**A12**	**B12**	RTSC	O	Serial port C RTS line
RS-422 port TXD+ line	O	TXDD+	**A13**	**B13**	TXDD-	O	RS-422 port TXD- line
RS-422 port RXD+ line	I	RXDD+	**A14**	**B14**	RXDD-	I	RS-422 port RXD- line
Signal Ground		GND	**A15**	**B15**	-		Reserved
Reserved		-	**A16**	**B16**	-		Reserved
Serial port B TXD line	O	TXDB	**A17**	**B17**	CTSB	I	Serial port B CTS line
Serial port B RXD line	I	RXDB	**A18**	**B18**	RTSB	O	Serial port B RTS line
CAN1 port CAN-H line	I/O	CAN1H	**A19**	**B19**	CAN1L	I/O	CAN1 port CAN-L line
CAN2 port CAN-H line	I/O	CAN2H	**A20**	**B20**	CAN2L	I/O	CAN2 port CAN-L line
Factory use only, must be left open		FUO	**A21**	**B21**	-		Reserved
Signal Ground		GND	**A22**	**B22**	1PPSA	O	1 Pulse Per Second output A *3
Signal Ground		GND	**A23**	**B23**	1PPSB	O	1 Pulse Per Second output B *3
Signal Ground		GND	**A24**	**B24**	EVENTA	I	Event input A *4
Signal Ground		GND	**A25**	**B25**	EVENTB	I	Event input B *4
Configurable Logic-Level I/O 0 line	I/O	GPIO0	**A26**	**B26**	GPIO1	I/O	Configurable Logic-Level I/O 1 line
Configurable Logic-Level I/O 2 line	I/O	GPIO2	**A27**	**B27**	GPIO3	I/O	Configurable Logic-Level I/O 3 line
Signal Ground		GND	**A28**	**B28**	RESET_IN#	I	Active Low Reset input *5
Ethernet port TX+ line	O	LAN_TX+	**A29**	**B29**	LAN_TX-	O	Ethernet port TX- line
Signal Ground		GND	**A30**	**B30**	LAN_LED	O	Ethernet port control for external LED
Ethernet port RX+ line	I	LAN_RX+	**A31**	**B31**	LAN_RX-	I	Ethernet port RX- line
Active Low input for ON/OFF switch *7	I	ONOFFSW#	**A32**	**B32**	IRIG_OUT	O	IRIG port output line *6



*1. Active Low input from the FN button of the MinPad. Must be left open if not used.

*2. LED1_GRN and LED1_RED are used to control the STAT LED of the MinPad. LED2_GRN and LED2_RED are equivalent to the REC LED of the MinPad. The output is a +3.3V driver in series with 100 Ohm resistor for each LED. LEDs should be with common cathode.

*3. Voh>1,8V at 50 Ohm load.

*4. Internal pull-up 5 kOhm to +3.3V

*5. Connect to ground to activate. Internal pull-up 2 kOhm to +3.3V.

*6. AM sine-wave signal; 2.1Vp-p (Mark), 0.7Vp-p (Space).

*7. Active Low input which is equivalent to ON/OFF button of the MinPad. The pin must be connected to GND permanently if the board is required to turn on automatically any time external power is applied to pins A2 and B2.

Read this First

Revision 1.2
March 11, 2009