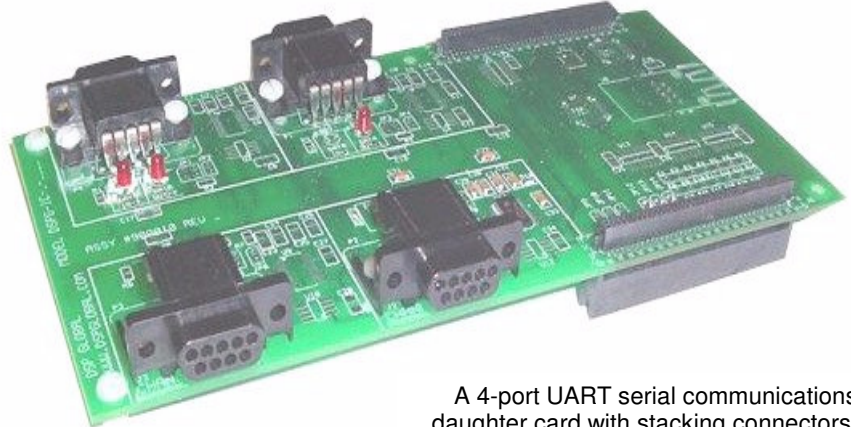


UART SERIAL COMMUNICATION PORT EXPANSION DAUGHTER CARDS WITH RS-232-C AND RS-422 INTERFACES FOR TI AND SPECTRUM DIGITAL DSK DEVELOPMENT SYSTEMS



DESCRIPTION

These stackable, UART (Universal Asynchronous Receiver Transmitter) Serial Communication Port Expansion daughter cards plug into TI and Spectrum Digital DSK DSP Development Systems and provide up to four additional UART serial ports with RS-232-C and RS-422 interfaces configured as a DTE (Data Terminal Equipment) and as a DCE (Data Communication Equipment). Cards with provisions for a software UART are also provided. These daughter cards conform to the Texas Instruments TMS320 Cross-Platform Daughter Card Specification for TI DSK and EVM Development Systems. A DB9, male-female cable is shipped with each daughter card.



A 4-port UART serial communications daughter card with stacking connectors.

CONFIGURATIONS

The serial port expansion daughter cards are available in two basic configurations:

1. 2-port and 4-port cards with UART's and RS-232-C or RS-422 interfaces. The UART's interface with the DSK via the address/data bus.
2. A single port card with an RS-232-C interface but no UART. This card is for those users developing products with a software UART. The software UART interfaces with the DSK via the McBSP port.

APPLICATIONS

These daughter cards provide the DSP developer with additional UART Serial Communication ports with two of the most common interfaces: RS-232-C and RS-422 configured as both a DTE and a DCE.

DEMONSTRATION/APPLICATION AND UART DRIVER SOFTWARE

Each card is shipped with application and demonstration programs for each of the supported DSK development systems. These programs are provided on a CD as complete TI Code Composer Studio projects. These programs include UART drivers and high level functions which relieve the user from having to deal with low level UART functions such as device accessing, handling of interrupts and circular data buffering. A Technical Reference Manual as a printable PDF file is available on the web site and on a CD supplied with each board.

SPEED

The top speed of each UART port is 230.4 Kbps.

COMPATIBILITY

At the present time, the TMS320 DSK's that are compatible with these daughter cards are: C5416, VC5510, C6711, C6713, and the C6416.

LED'S

Two LED' s on each serial communication port monitor the data in and data out lines and indicate the presence of data signals between the UART and the interface. A Green LED (Green for "GO") monitors the data out line and is labeled "Data Out". A Red LED (Red for "Received"), monitors the data in line and is labeled "Data In".

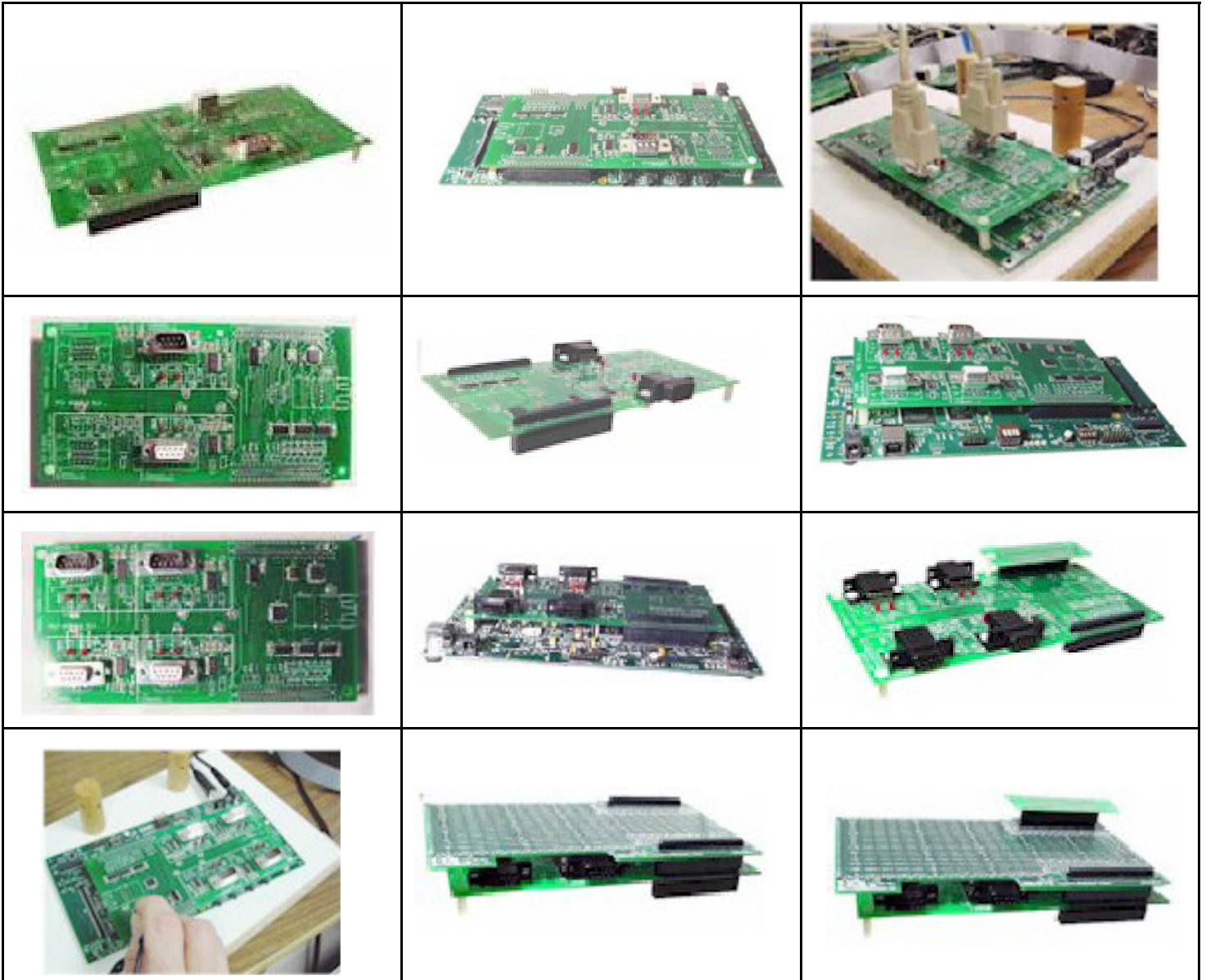
STACKING

All of the Serial Port Expansion daughter cards are available with or without stacking connectors installed. This allows other daughter cards and prototyping daughter cards to be plugged into the card. Cards with this option will always be equipped with right-angle DB-9 connectors (Upright DB-9 connectors are normally supplied) to allow room for another daughter card to be plugged in on top. A typical daughter card with stacking connectors is shown above. Plug-in height extenders that increase the distance between cards are also available.

DETAILS AND PRICING

Go to our website at www.dspglobal.com for detailed specifications, pricing, and photo' s.





ROW 1:

- 1) 2-port interface daughter card with serial interface connectors on top and DSK interface connectors on the bottom.
- 2) 2-port interface daughter card plugged into a DSK DSP Development System.
- 3) 2-port interface daughter card plugged into a DSK DSP Development System in a lab environment.

ROW 2:

- 1) Top view of 2-port interface daughter card.
- 2) 2-port interface daughter card with stacking connectors.
- 3) 4-Port interface daughter card plugged into a DSK DSP Development System.

ROW 3:

- 1) Top view of 4-port interface daughter card.
- 2) 4-port interface daughter card with stacking connectors, plugged into a DSK DSP Development System.
- 3) 4-port interface daughter card with breakout panels plugged into stacking connectors.

ROW 4:

- 1) 4-port interface daughter card plugged into a DSK DSP Development System in a lab environment.
- 2) ProtoPlus prototyping daughter card with stacking connectors plugged into a 4-port interface daughter card with stacking connectors.
- 3) Breakout Panel plugged into a ProtoPlus prototyping daughter card with stacking connectors which in turn is plugged into a 4-port interface interface daughter card also with stacking connectors.

HOW TO ORDER

Order on-line at www.dspglobal.com/how.htm

RS-232-C INTERFACE SERIAL COMMUNICATION PORT DAUGHTER CARDS

Each card is shipped with a 6 foot cable, with a 9-pin, male DB-9 connector at one end and a female DB-9 connector at the other end and a CD containing UART driver software, applications and demonstrations. At the time of order, the DTE/DCE configuration, and the interface of any port can be specified. A DTE always has a male connector and a DCE always has a female connector.

MODEL	DESCRIPTION
DSPG-IC1-232	1 RS-232-C port, for software UART, as DTE with male DB-9.
DSPG-IC1-232-S	1 RS-232-C port, for software UART, as DTE with male DB-9, Stackable.
DSPG-IC2-U232	2 UART-to-RS-232-C ports, 1 as DTE with male DB-9, 1 as DCE with female DB-9.
DSPG-IC2-U232-S	2 UART-to-RS-232-C ports, 1 as DTE with male DB-9, 1 as DCE with female DB-9, Stackable.
DSPG-IC4-U232	4 UART-to-RS-232-C ports, 2 as DTE with male DB-9, 2 as DCE with female DB-9.
DSPG-IC4-U232-S	4 UART-to-RS-232-C ports, 2 as DTE with male DB-9, 2 as DCE with female DB-9, Stackable.

RS-422 INTERFACE SERIAL COMMUNICATION PORT DAUGHTER CARDS

Each card is shipped with a 6 foot cable, with a 9-pin, male DB-9 connector at one end and a female DB-9 connector at the other end, and a CD containing UART driver software, applications and demonstrations.

DSPG-IC1-422	1 RS-422 port, for software UART, as DTE with male DB-9.
DSPG-IC1-422-S	1 RS-422 port, for software UART, as DTE with male DB-9, Stackable.
DSPG-IC2-U422	2 UART-to-RS-422 ports, all as DTE with a male DB-9.
DSPG-IC2-U422-S	2 UART-to-RS-422 ports, all as DTE with a male DB-9. Stackable.
DSPG-IC4-U422	4 UART-to-RS-422 ports, all as DTE with a male DB-9.
DSPG-IC4-U422-S	4 UART-to-RS-422 ports, all as DTE with a male DB-9. Stackable.

OPTION

DSPG-DB9-CABLE	6 foot cable, with male, 9-pin, DB-9 connector at one end and female, 9-pin, DB-9 connector at the other end.
----------------	---

QUANTITY DISCOUNTS

6 to 10: 10%. 11 to 24: 15%. 25 or more: 20%. Universities: additional 10%.

SHIPPING

Shipped same day upon receipt of order. USA: FREE (UPS Blue, 2 days) for orders of \$99 or more; \$15 (UPS Red, overnight). Canada: FREE (UPS Standard Service, 3-5 days). International: \$15 (Global Express 2-3 days).

WARRANTY

30 days against all defects.