Connect Tech Inc. Industrial Strength Communications

Daughter Board

The Daughter Board is an adapter for Connect Tech's FreeForm/104 board that enables users to capture and process synchronous and asynchronous RS232 or RS485/RS422 serial data with customizable FPGA implementations. Replacing the physical UART with an FPGA solution allows for a great deal of customization and flexibility.

When used with a FreeForm/104 board, the Daughter Board allows for easy and rapid design changes at run time, which makes it ideal for high speed, compute intensive, reconfigurable applications.



Connecting directly to the Digital I/O headers on the FreeForm/104, the "Daughter Board" also includes a PC/104 pass-through connector to allow the board to sit in-stack with the FreeForm/104 board.

FreeForm 104 for FPGA and Digital I/O FreeForm/104 is a PC/104 based card that features a reconfigurable FPGA for digital I/O and control applications.

Specifications

Number of Ports	2
Electrical Interface	Synchronous RS-232, RS-422, RS-485
Control Signals	TxD, RxD, DTR, RTS, CTS, DCD, TxClk, RxClk
Connectors	PC/104 pass-through 2x50 pin connector to connect to FreeForm 2x26 pin header connectors (optional ribbon cables with female 26 pin IDC to female DB-25 connectors available)
Baud Rate	RS-232: Up to 1Mbps RS-422/RS-485: Up to 10Mbps
Dimensions	Length: 14.699 cm/5.750" / 9.5885cm/3.775" Height: 11.049 cm/4.350" / 9.017cm/3.55"
Temperature	0°C to 70°C (-32°F to 158°F)
Bus	PC/104
Software Compatibility	Windows, Linux, QNX
System Requirements	Varies by configuration
Regulatory Approvals	FCC Class A EN50082-2 ICES-003 Class A EN 55022 Class A EN 55024
Warranty and Support	Lifetime warranty and free technical support



Product Name: Daughter Board

FEATURES

✓ Integration with the Freeform/104 Xilinx Spartan-3E FPGA enables UART design and data capture customization

✓ Two switchable RS-232, RS-422 or RS-485 channels, configurable to be fully synchronous or asynchronous

 ✓ Pass-through PC/104 connector allows the Daughter Board to stack with the Freeform/104 parent-board

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