

JT 2111/MPV - DIOS (DIGITAL IO SCAN) MODULE

Digital IO System with 'multi-programmable voltage'



JT 2111

Digital IO system for existing controllers

- 64 I/O channels in total
- Available with DIN 41612 or IDC connections
- Adjustable voltage levels
- Advanced features

The JT 2111/MPV DIOS module is a auxiliary JTAG controlled I/O for use in test systems . It features 64 I/O channels accessible through a single DIN 41612 or four x 20-way IDC connections. Channels are split into four blocks of 16 with each block associated with a 'component' that can be bypassed if required.

This compact unit was designed for easy integration into fixtures or bench use, making it ideal for production testing or as an everyday board debug tool.

The I/O channels offer bi-directional digital signals on every pin allowing connectors and/or test points of a Unit Under Test (UUT) to be sensed and driven as part of a JTAG/Boundary-scan test. By implementing I/O channels of a JT 2111/MPV users enjoy increased test coverage for the digital elements of a UUT.

Th JT 2111/MPV features two TAP connections 'In' and 'Out'. For single module applications, where only the JT 2111 is connected to a JTAG controller, TAP 'In' only is used and the TDO line is returned to the controller. For applications where more that one module is needed or the user wishes to 'daisy-chain' the module with the UUT the TAP 'Out' can be used. Connecting a cable to TAP 'Out' automatically re-routes the TDO line accordingly.

Output logic thresholds are set via a rotary switch at the rear of the unit. 3.3, 2.5, 1.8 and 1.5 Volt levels are available and the selection is displayed by an LED indicator.

A number of additional functions are available to advanced users by manual editing of BTSL (APL) files or JFT (Python) scripts - these include: target disconnect (hot-swap), voltage switch read-back, 200mA target power supply check.

The unit is fully supported by JTAG Technologies application development tools (ProVision and JTAG Live) and run-time software options such as PIP/LV (drivers for NI LabView), PIP/TS (drivers for TestStand), etc.

Ordering information

JT 2111/MPV - DIN supplied with single DIN 41612 style 96-way connector

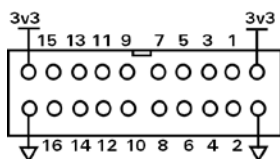
JT 2111/MPV- IDC supplied with four IDC type 0.1" 20 way connectors

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Specifications	
Power	Environmental*
12V/2A - power adapter supplied.	Operating temperature: 0 - 70 degrees C
Logic	Storage/transit temperature: -40 - 70 degrees C
Inputs: 5V tolerant $I_{in} < 1\mu A$	Operating humidity: 15%-90% non-condensing
Outputs: 3.3V, 2.5V, 1.8V, 1.5V (selectable) Current Drive & Sink 12mA - 4mA (voltage dependant)	Storage humidity: 5%-95% non-condensing
Channels in four blocks A, B, C, D - 16 IOs per block	Vibration: Swept sine 5-55Hz, 2g (0.33mm p-p), 15 mins per axis
JTAG (IEEE Std. 1149.1)	Operating altitude < 4500 m
Maximum TCK: 25MHz Boundary-scan Register ; 17 MHz - Identity code Reg	Storage altitude < 12000m
	* compliant (MIL-T-28800D, Type III, Class 5 EP)

Front panel connections



IDC pin-out for channel blocks A, B, C and D in JT 2111/MPV - IDC variant

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