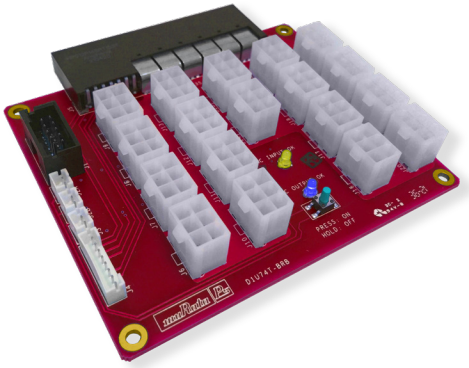
D1U74T-BRB

225A BREAK-OUT BOARD KIT



Shown connected with Murata D1U74T-W-2700-12-HB4C, available separately, contact Murata for availability

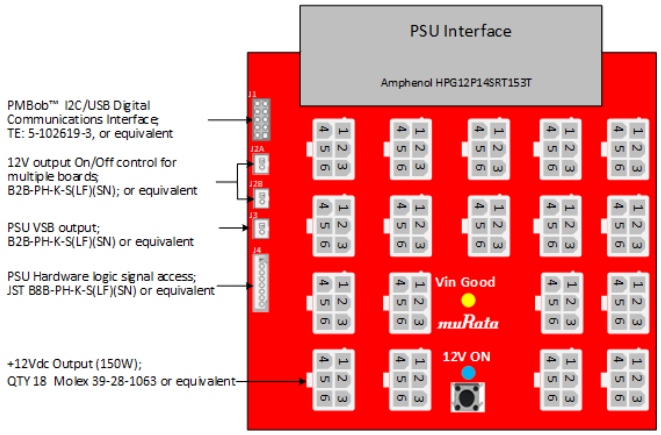
OVERVIEW

This document shall serve as an Advance Product Brief of a “new” 225A break-out interface connector board kit that adapts Murata’s 80+ certified Titanium CRPS D1U74T-W-1600-12-HB4C & D1U74T-W-2700-12-HB4C CRPS series power supplies for crypto mining and blockchain applications.

This board kit includes the cables and connections necessary to provide power to up to QTY 18 150W GPU/ASIC cards use in PCIe riser and large-scale mining rig deployments where reliable, high-volume computations are essential.

FEATURES

- Adapts highly efficient Titanium Murata D1U74T-W-1600-12-HB4C & D1U74T-W-2700-12-HB4C Power Supply Modules
- Increased QTY GPU/ASIC support; 18x 150W power connectors provided
- VIN Good & 12V Present LEDs
- Smart ON/OFF control; multiple break-out boards from single switch operation
- Protective bottom cover included
- Nominal Dimensions: 108mm (W) x 90mm (L) x 17.2mm (H)
- Robust FCI/Amphenol HPG12P14SRT153T PSU interface
- PMBus™ & PSU hardware signal access provided for system side control and monitoring
- Supports Murata PMBob™ I2C to USB interface
- Each kit includes QTY 10, 18AWG 19.68 inch (500mm) 6-posiiton to 8-position PCIe cables
- Factory Installed UL 94 VTM-0 rated Formex GK-17 cover



Header / Connector location Illustration; (Refer to mechanical outline for details)

Bottom View

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SAFETY PRECAUTION

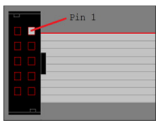
The D1U74T-BRB interface connector card is intended to be used with Murata Power Supply Modules. These components are intended to be built into a safety enclosure (system/host). The installation of the interface connector card and power supply module must be verified and approved in the end system safety certification.

INTERFACE HEADER FUNCTION

J1 – "PMBob™" Interface Connector

J1 Breaks out the PMBus signals required for digital communications with the power supply and is compatible with Murata's PMBob I²C to USB Interface.

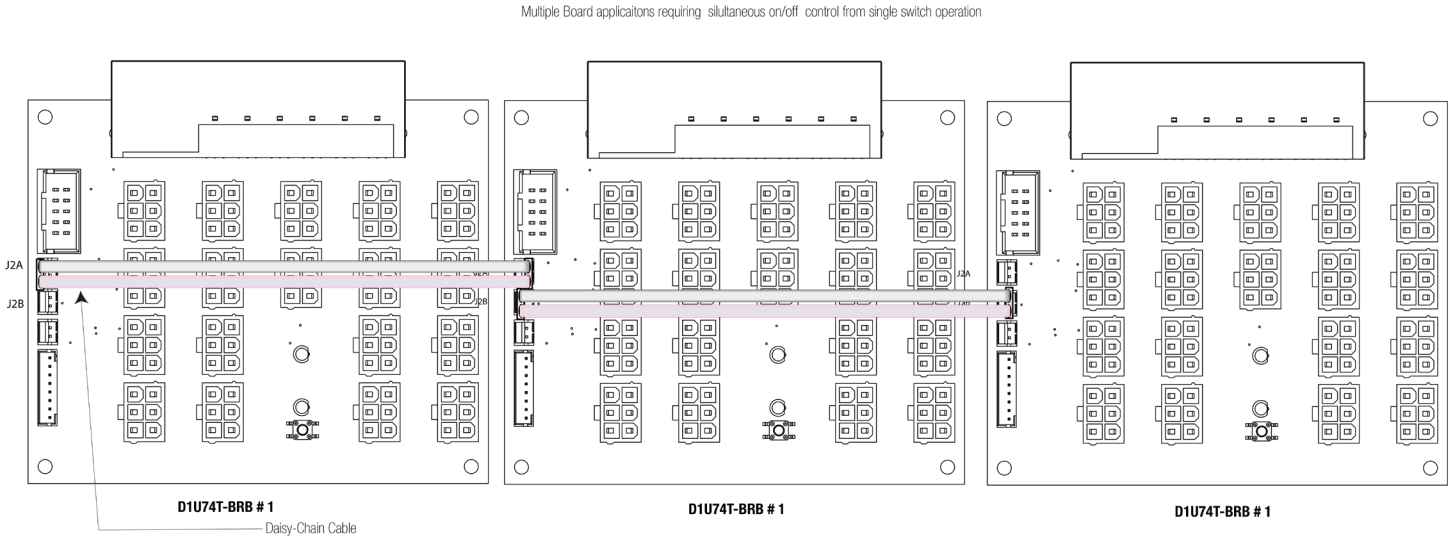
(Contact Murata for availability)



Pin	Function	Pin	Function
2	Return (GND)	1	Serial Clock (SCL)
4	Switched Power (+5V)	3	Serial Data (SDA)
6	Switched Power (+5V)	5	GPIO Line
8	No Connect	7	No Connect
10	Return (GND)	9	Force Boot load Mode (active low)

J2A and J2B – Multi-Board On/Off Control Connectors

J2A and J2B extend the on/off switch operation to all D1U74T-BRB connected via the Murata provided daisy-chain cable. This provides a convenient method to turn on/off the 12V output of multiple boards simultaneously (from any of the daisy-chained boards). Connect the Murata daisy-chain cable as shown in illustration below:



J4 Power Supply Hardware Logic Signals

J4 Provide access to the power supply's hardware status logic signals for monitoring. Refer to the Murata D1U74T-W-xxxx-12-HB4C power supply datasheet for additonal details.

Pin	Function	Description
1	VIN_GOOD	This signal is an output that indicates input source power is present and within operating limits.
2	Reserved for Future use	Leave unterminated; No User Connection
3	SMBAlert#	SMBALERT# is a PMBus™ 1.2 complaint signal driven low to alert the system that a warning/fault occurred
4	PWOK	This is a power OK signal and is pulled high (3.3V nominal) to indicate all the outputs are within the regulation limits
5	A0	Internal SMBus slave device address selection settings required for digital communications.
6	A1	Refer to datasheet for details.
7	VSB	12V, 3A max. standby voltage
8	GND/+12V RTN	Common return point for signals, main 12V and VSB outputs

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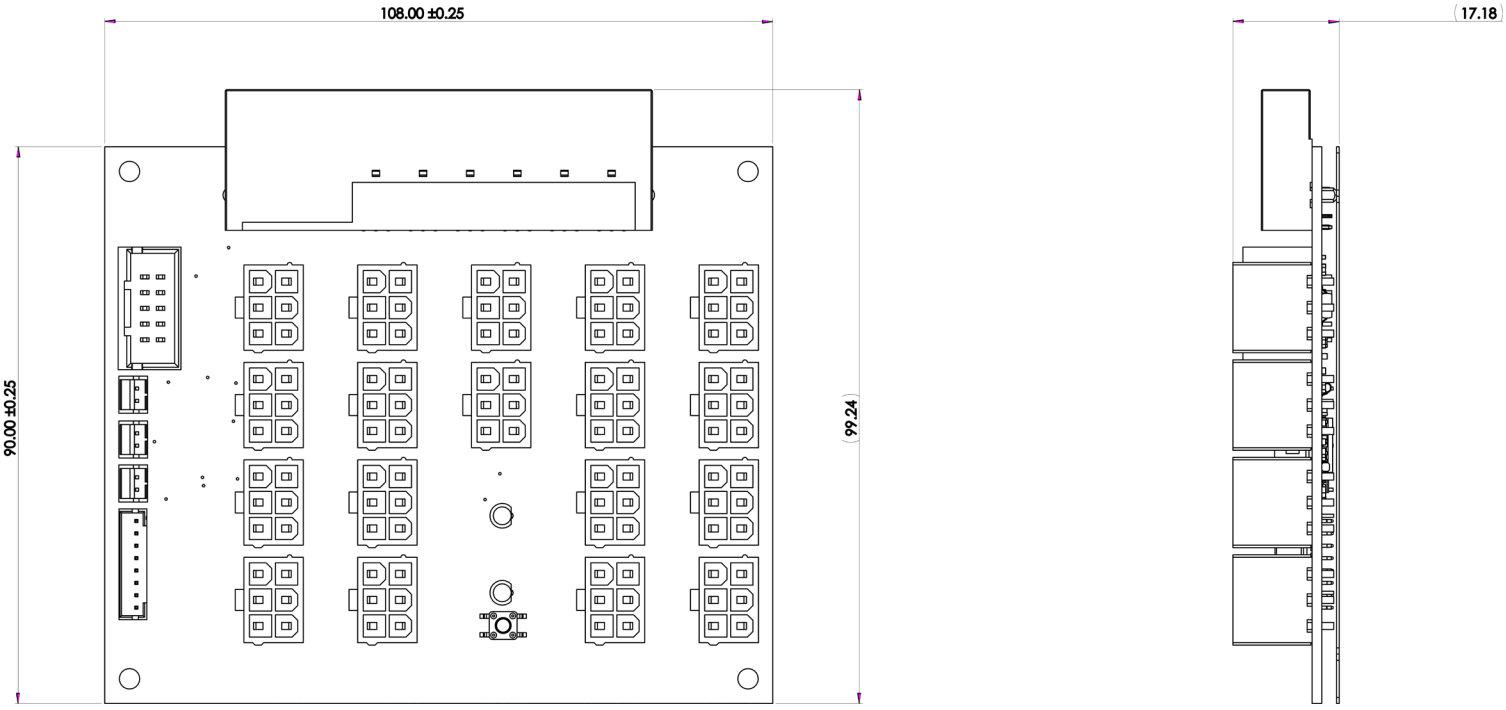
LED STATUS INDICATORS

D1U74T-BRB provides two indication LEDs described below:

Yellow LED
The Yellow LED indicates the status of the power supply's input voltage ON = Vin is present and within operational limits OFF = Vin not present or is outside operational limits
Blue LED
The Blue LED indicates the status of the 12Vdc main output ON = 12V is output is present at the QTY 18 output connection headers Off = 12V output is not present at the QTY 18 output connection headers

MECHANICAL DETAILS



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ISO 9001 REGISTERED

This product is subject to the following operating requirements and the Life and Safety Critical Application Sales Policy: Refer to: https://www.murata-ps.com/requirements/