

OVERVIEW

D1U86T-12-CONC(2200W) is a single power module interface connector that simplifies evaluation of the supported power modules by providing access connections to the various signals and power connections.

Use in conjunction with the product's datasheet and PMBus ACAN.

ORDERING GUIDE

| Connector Card Model Number | Supported Products | Power Output | Main Output | Standby Output ("SB") |
|-----------------------------|-----------------------|--------------|-------------|-----------------------|
| D1U86T-12-CONC(2200W) | D1U86T-W-1600-12-HBxC | 1600W | 12Vdc | 12Vdc |
| | D1U86T-W-2200-12-HBxC | 2200W | | |

SAFETY PRECAUTION

The D1U86T-12-CONC(2200W) output connector card is intended to facilitate the connection of the output supply rails of the power module. As such there a high energy source exposed on the output connector card; please take the necessary safety precautions during the use of this connector card for product evaluation. Additionally, care must be taken to ensure that the maximum ratings of system or load side connection components including wire is not exceeded.



SCHEMATIC – D1U86T-12-CONC(2200W)

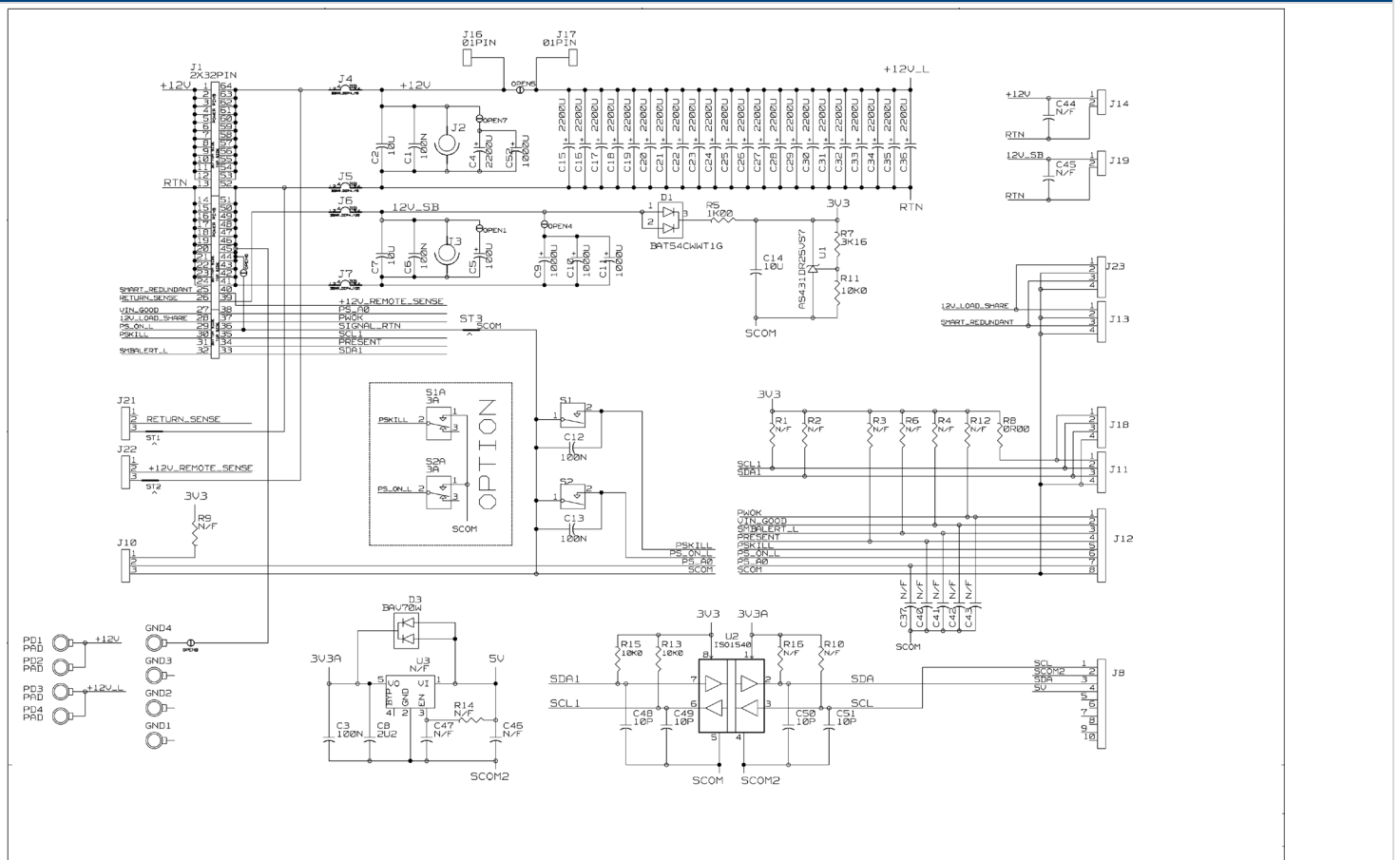
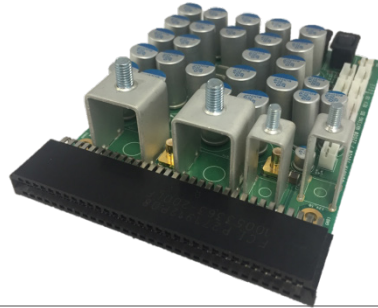
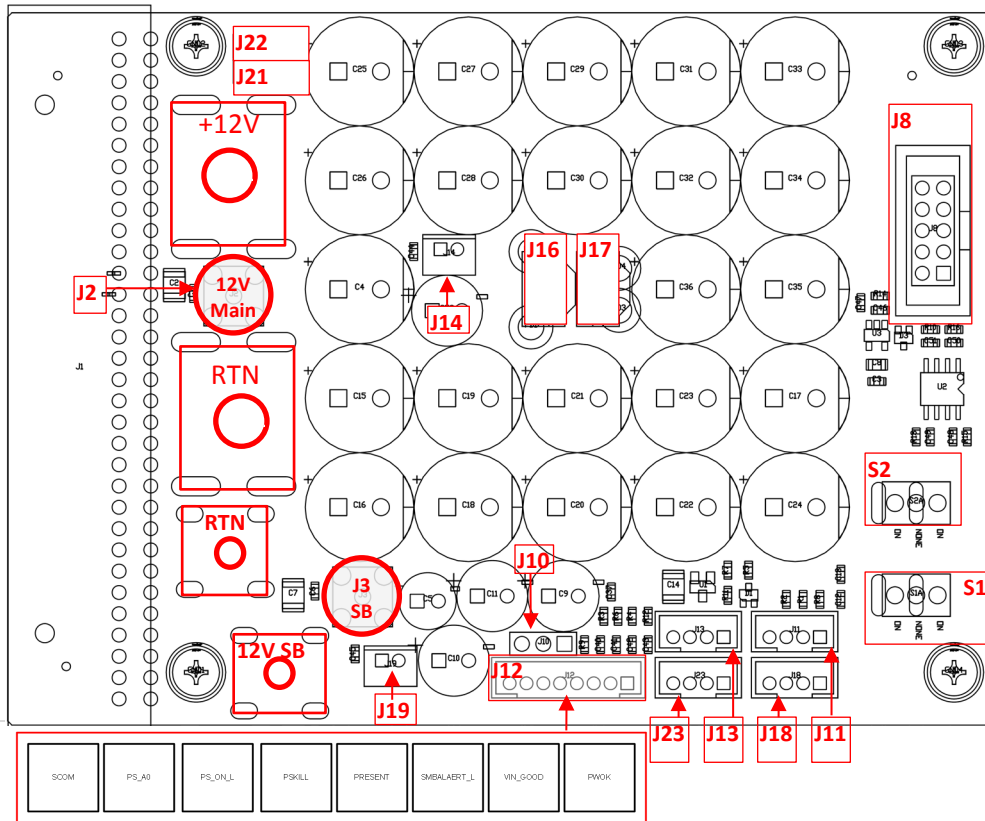


IMAGE – D1U86T-12-CONC(2200W)



Top View of Connector Locations



DESCRIPTION OF CONNECTORS AND SWITCHES:

Output connections: Main 12V output load connections are provided via two M5 screw studs. Ring terminals and cable gauge commensurate with the output current of 183Adc must be selected by the End User. M3.5 screw studs/terminals that are provided for the 12VSB output.

J2 & J3 TE Connectivity P/N 1-337482-0 RF / Coaxial, Str PCB Skt 50 Ohm female connectors provide a means to connect an oscilloscope directly to the outputs; each node is filtered with the standard parallel connected 10µF tantalum and 100nF ceramic capacitor across tip to ground as typically required for accurate ripple/noise measurements.

J8 accommodates **PMBob™** USB to I²C adapter for digital PMBus Communications. Refer to ACAN 95 for details related to PMBus™ Communications Protocol.

J11 & J18 are connected in parallel and provide access to PMBus clock (Pin 2) & data signals (pin 3), and also internal 3.3VDC bias supply (pin 1) and RTN (pin 4)

J12 (JST B8B-PH-K-S(LF)(SN)) 8 position header provides access to the following hardware signals.

| Schematic name → Datasheet name | Schematic name → Datasheet name | Schematic name → Datasheet name | Schematic name → Datasheet name |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| SCOM → SIGNAL RETURN | PS_ON_L → PSON | PRESENT → PRESENT | VIN_GOOD → VIN_GOOD |
| PS_A0 → A0 | PSKILL → PS_KILL | SMB_ALERT_L → SMB_ALERT | PWOK → PWOK |

J22 & J21 (FCI 68004-403HLF) three position headers provide access to the main output VSENSE ‘+’ and ‘RTN’ and are configured as follows:

- Default / Unterminated provides no load connection voltage drop compensation.
- Jumping pin 2 to 3, both connectors compensate for the power module to output connector voltage drop.
- Remote sense is achieved by connecting J22 Pin 2 to ‘+’ remote load connection point and J21 pin 2 to the ‘RTN’ remote load connection point, providing up to +/-200mV compensation for up of remote load connection voltage drop.

J13 & J23 (JST B2B-PH-K-S) are parallel connected four position headers and provide connection points for ISHARE (pin 1), RTN (pin 2 & 4), and smart redundancy signal ‘CR_BUS’ (pin3)

J14 & J19 (JST B2B-PH-K-S) are two position headers that can be used for main (J14) and VSB (J19) output voltage measurement. Pin 1 is ‘+’ and Pin 2 is ‘RTN’.

S1 & S2 rocker switches can be used to activate PSKILL and PS_ON_L respectively.

J16 & J17 0.25” quick connect male tabs provide a means to switch the QTY 22x 2,200uF E-Caps in and out of the 12V main bus. Open = no load capacitance, a short = connection of the E-Caps to the 12V main bus.

J10, Pin 2 can be used to set the internal slave device address as follows:

| Address options: | | |
|----------------------|--------------------------|-----------------|
| A0 Setting: | Secondary Microprocessor | External EEPROM |
| LOW (short to SCOM) | 0xB0 | 0XA0 |
| HIGH (default, open) | 0xB2 | 0XA2 |

OPTIONAL ACCESSORIES

| Description | Part Number |
|--|--|
| PMBob™ USB to I ² C interface | MS-PMBob (Check with Murata for availability) |

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