

### OVERVIEW

D1U86T-12-CONC is an interface connector card that is intended to interconnect the output voltages and signals of the D1U86T-W-800-12-HBxC Series power supply for laboratory/bench level evaluation of the product.

Refer to the product datasheet and PMBus™ application note [ACAN-85](#) for additional details related to the description and operation of the signals and features referenced in this application note.

### ORDERING GUIDE

Connector Card Model Number	Supported Product	Power Output 90-264Vac	Main Output	Standby Output ("SB")	Airflow
D1U86T-12-CONC	D1U86T-W-800-12-HB4C	800W	12Vdc	12Vdc	Back to Front

### SAFETY PRECAUTION

The D1U86T-12-CONC 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.

### SCHEMATIC – D1U86T-12-CONC

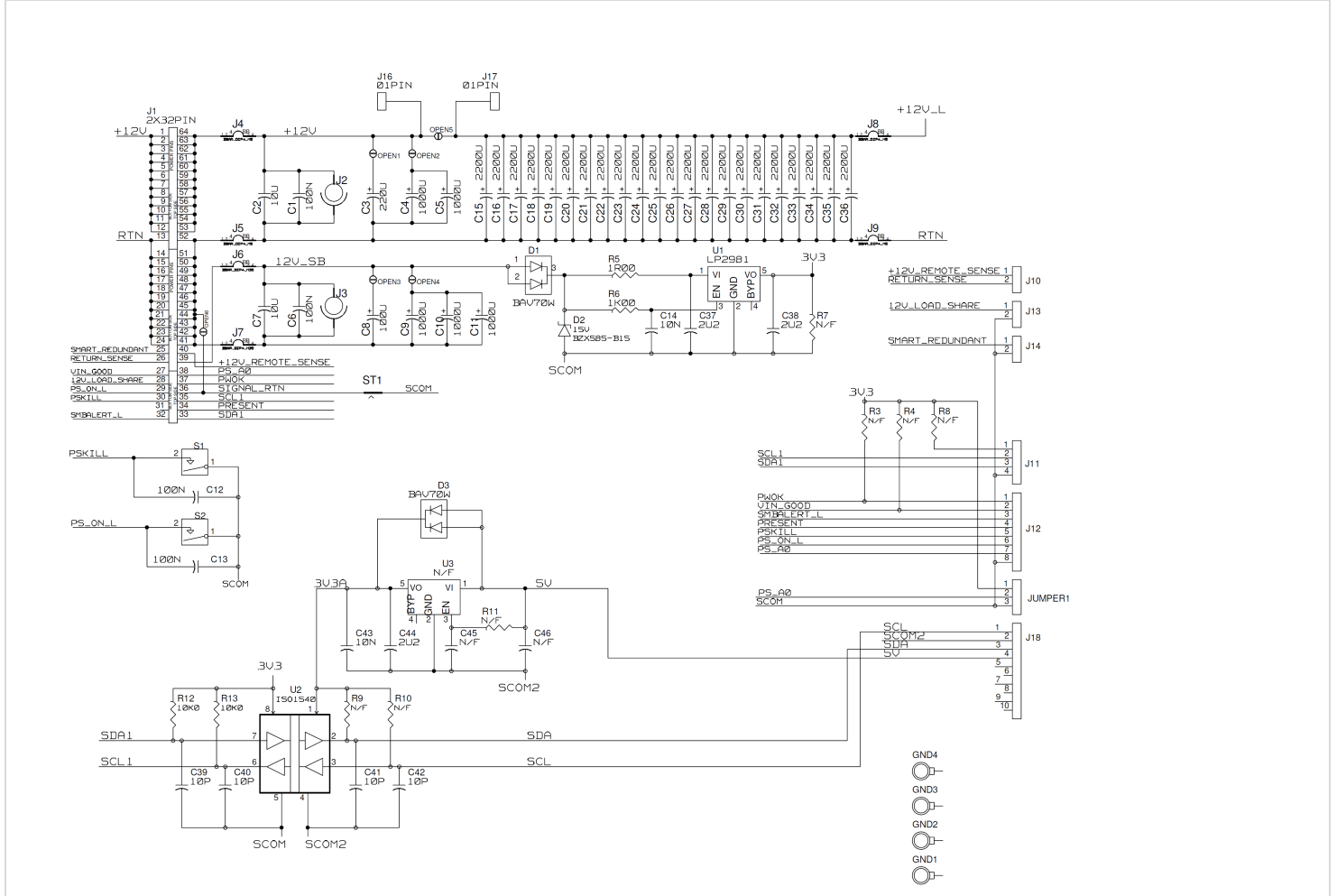
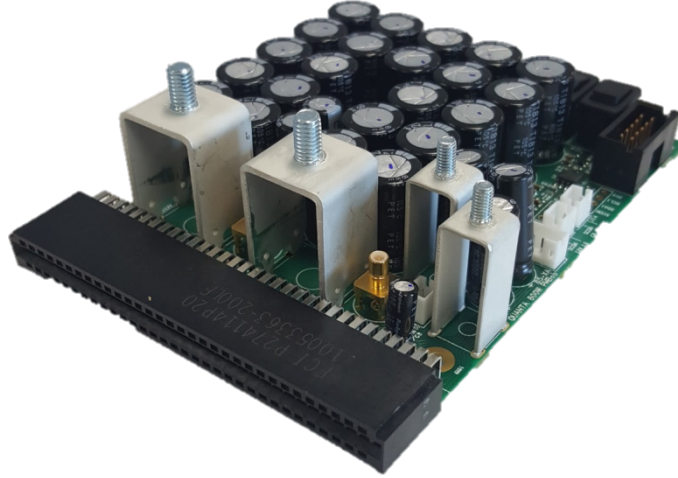
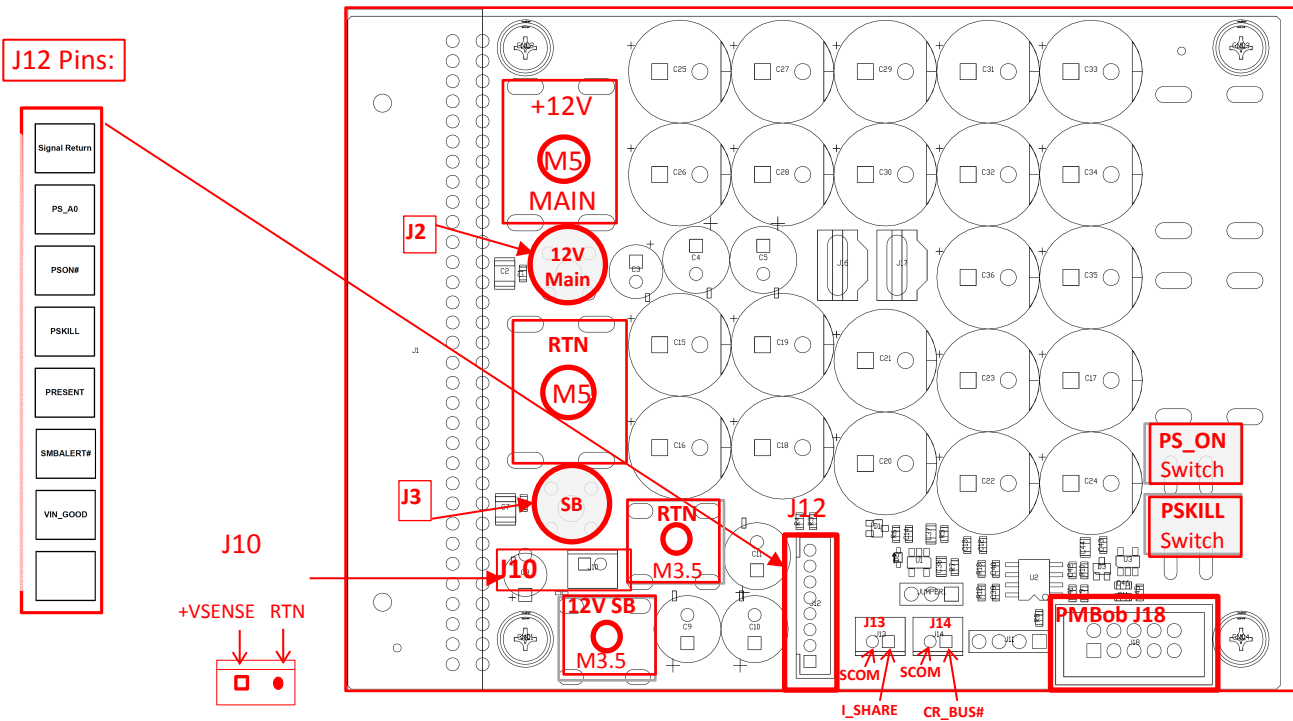


IMAGE – D1U86T-12-CONC



Top View – D1U86T-12-CONC



### CONFIGURATION NOTES:

This connector card is “pre-configured” for immediate end use. The following describe the connections and features:

1. Output connections are provided by screw studs for both sets of outputs:
  - The **Main 12VDC** power connections are provided with M5<sup>1</sup> screw studs/terminals that are intended as a means of interconnecting the main 12VDC to the required load via cables. Ring terminals and cable gauge commensurate with the output current of 67Adc to be selected by the End User.
  - The **12Vsb** power connections are provided with M3.5<sup>1</sup> screw studs/terminals that are intended as a means of interconnecting the 12Vsb to the required load via cables.

*<sup>1</sup> Ring terminals and cable gauge commensurate with the output current specified in the product datasheet are to be selected by the End User.*

2. **J2 & J3** are connectors provided for output voltage and ripple/noise measurement for each output. The connectors are TE Connectivity P/N 1-337482-0 RF / Coaxial, Str PCB Skt 50 Ohm female. In addition each connection node is filtered with a parallel connected 10µF tantalum and 100nF ceramic capacitor across tip to ground for ripple/noise evaluation.
3. **J18** is provides a means of digital communication between the power supply and a computer over the PMBus™. **PMBob™** USB to I<sup>2</sup>C adapter. This along with the Murata Power Solutions software GUI, is the recommended communication platform for initial bench evaluation when it is desirable to communicate between a computer and the power supply. Refer to [ACAN 85](#) for the supported PMBus™ Communications Protocol for this product
4. **J12** (JST B8B-PH-K-S) is an 8 position header provided for access to the following i/o signals
  - Signal Return (“SCOM”)
  - PS\_A0
  - PSON#
  - PSKILL
  - PRESENT
  - SMBALERT#
  - VIN\_GOOD
5. **J10** (JST B2B-PH-K-S) is a two position header provided for access to main output voltage remote sense points.
6. **J13** (JST B2B-PH-K-S) is a two position header provided for access to main output active current share bus/signal “I\_SHARE”
7. **J14** (JST B2B-PH-K-S) is a two position header provided for access to the Cold Redundant bus signal “CR\_BUS#”
8. **S1** and **S2** rocker switches can be used to activate PSKILL and PSON respectively.

## OPTIONAL ACCESSORIES

Description	Part Number
PMBob™ USB to I <sup>2</sup> C interface <sup>2</sup>	MS-PMBob

<sup>2</sup> Check with Murata for availability

Refer to datasheet for additional details.

## Referenced Document Links

Document Number	Description	Link to Document
ACAN-85	D1U86T-W-800-12-HBxC Communication	<a href="http://power.murata.com/datasheet?/data/apnotes/acan-85.pdf">http://power.murata.com/datasheet?/data/apnotes/acan-85.pdf</a>

Murata Power Solutions, Inc.  
 129 Flanders Rd. Westborough,  
 Ma 01581, USA.  
 ISO 9001 and 14001 REGISTERED



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

Murata Power Solutions, Inc. ("Murata") makes no representation that the use of its products in the circuits described herein, or the use of other technical information contained herein, will not infringe upon existing or future patent rights. The descriptions contained herein do not imply the granting of licenses to make, use, or sell equipment constructed in accordance therewith. Buyer represents and agrees that it has all the necessary expertise to create and implement safeguards that anticipate dangerous consequences of failures, monitor failures and their consequences, lessen the likelihood of failures that might cause harm, and take appropriate remedial actions. Buyer will fully indemnify Murata, its affiliated companies, and its representatives against any damages arising out of the use of any Murata products in safety-critical applications. Specifications are subject to change without notice.

© 2018 Murata Power Solutions, Inc.