

APPLICATION NOTE

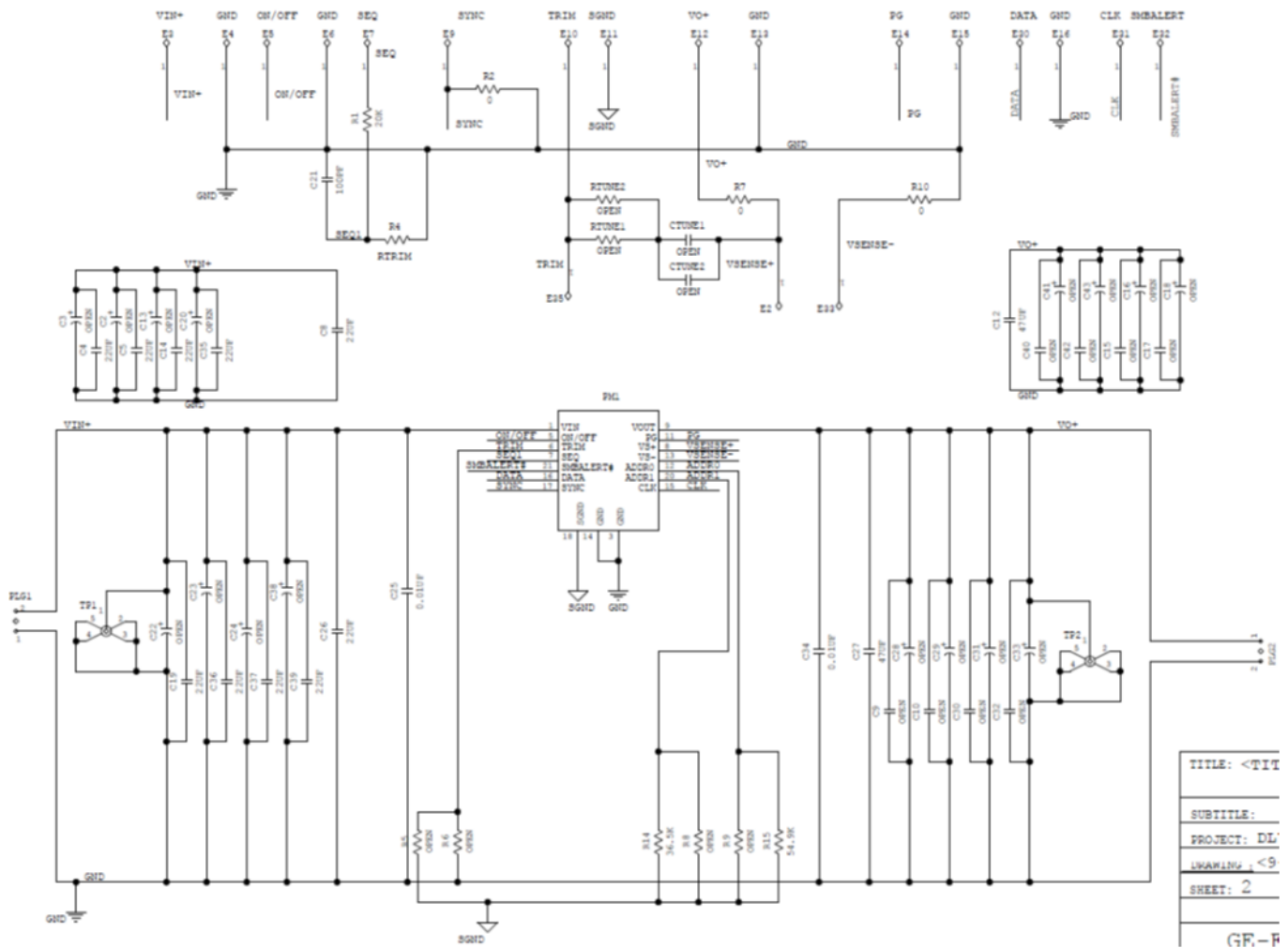
SlimLynx™ Series Evaluation Board Documentation

The SlimLynx™ series evaluation board (EVAL_PNDT012A0X3-SRZ) Boards come with an assembled module and test components

Schematics

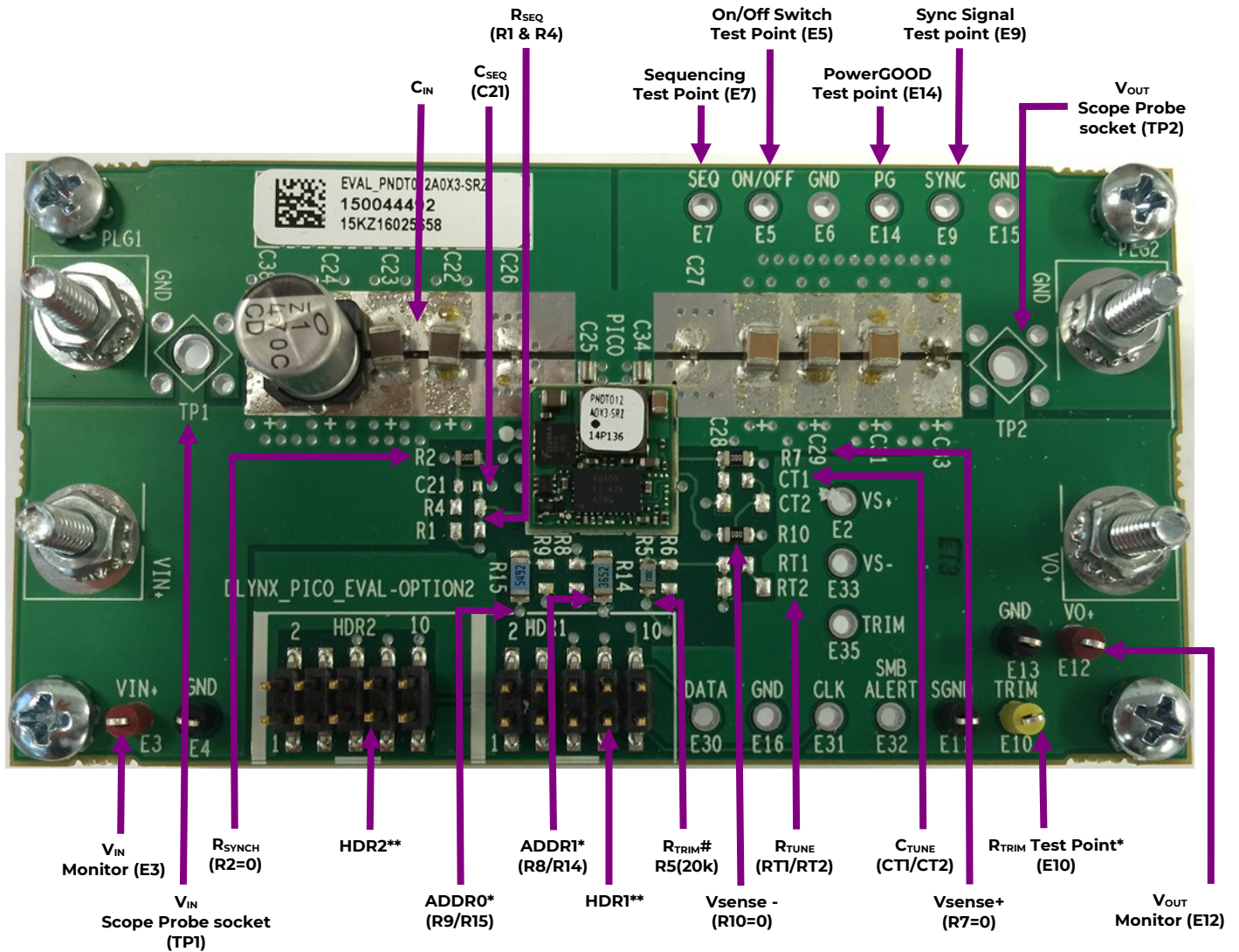
Component values are for reference only; refer to the data sheet for appropriate values and pictures in this document for preinstalled component

PICO SLIMLYNX MODULES (DLYNX_PICO_EVAL-OPTION2)



Pre-Installed components for the SlimLynx™ include input filtering [C_{25} (0.047uF,16V), C_{22} (22uF,16V), C_{23} (22uF,16V), C_{26} (0.1uF,16V), C_{38} (470uF,16V)], output filtering [C_{34} (0.047uF,16V), C_{27} (0.1uF,16V) C_{28} , C_{29} , C_{31} (47mF,6.3V), C_{33} (1uF,16V)], R_{SENSE} resistors, R_7 & R_{10} = 0 Ohms, Trim R_5 =20K, Address R_{15} =54.9K, R_{14} =36.5K and some test points.

10-Pin Ribbon Cable to USB Interface Adaptor or Second Eval Board



Power and Analog Signal Interface for the PNDD012 Eval Board

*Module can be trimmed either by soldering a different fixed resistors @ R_5 or by attaching a potentiometer/resistor between test points E11 and E35.

* The SlimLynx module can be assigned a specific address by connecting resistors (R_9/R_{15}) from the ADDR0 pin to GND and resistors (R_8/R_{14}) from the ADDR1 pin to GND. The evaluation board comes with preinstalled ADDR1 resistor R_{14} =36.5K and ADDR0 resistor, R_{15} =54.9K as an example. These values correspond to Octal digits "3 4" equivalent to HEX number "1C" (equivalent to 28 decimal). Please refer to the data sheet for additional details.

** HDR1/HDR2 allow the unit on the Eval board to interface (via 10 pin Ribbon Cable) with another unit on a different Eval Board and/or to OmniOn "USB Interface Adapter" module in order for multiple modules to be controlled by the GUI. For further details, please refer to the OmniOn document, "Digital Power Insight™ User Manual".

Notes:

Note1: The red wire on the ribbon cable should be aligned to Pin 1 (left side) of the HDR1 or HDR2 connectors.

Note2: Headers and Ribbon Cable Assembly details:

Part Description (HDR1 & HDR2): 10-Pin Dual Row Male Pin Header, SMT

e.g. FCI P/N: 95157-210 (Digi-Key P/N: 95157-210-ND) or Molex P/N: 0015910100

Part Description: IDC Ribbon Cable Assembly

e.g.: 3M P/N: M3DDA-1018J (Digi-Key P/N: M3DDA-1018J-ND) or Molex P/N: 111062-022

Change History (excludes grammar & clarifications)

Revision	Date	Description of the change
1.0	12/09/2022	Updated as per ABB template
1.1	11/09/2023	Updated as per OmniOn template

OmniOn Power Inc.

601 Shiloh Rd.
Plano, TX USA

omnionpower.com

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