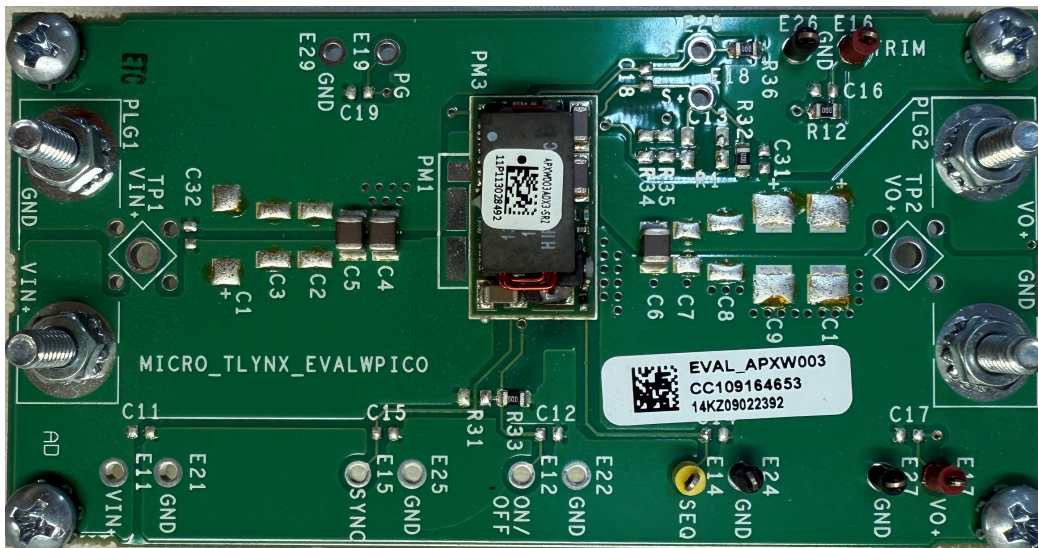
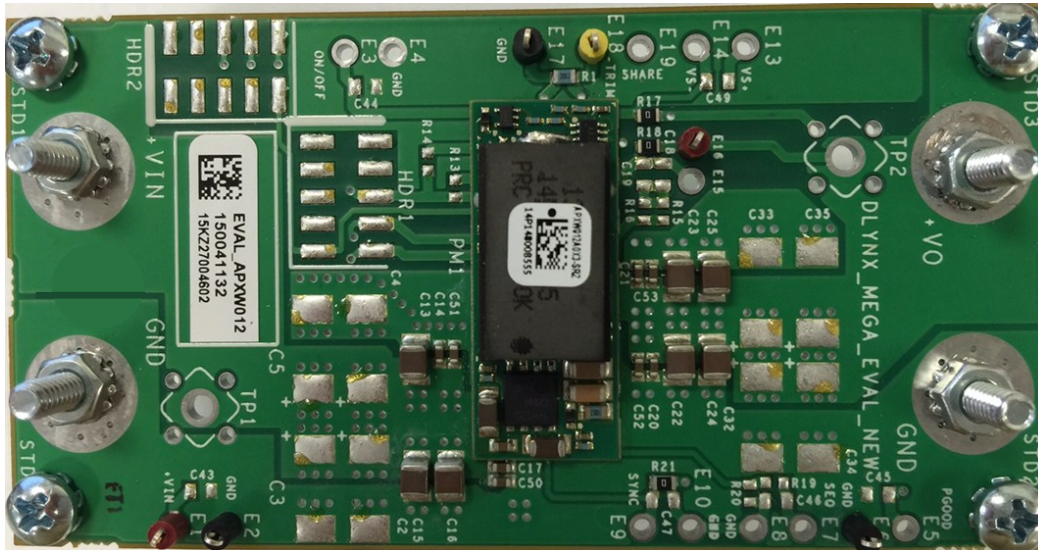


APPLICATION NOTE

# APXW003/APXW005/APXW012

Evaluation Boards populated with APXW003 / APXW005 or APXW012 modules



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## 1. Description of APXW003/005 Board

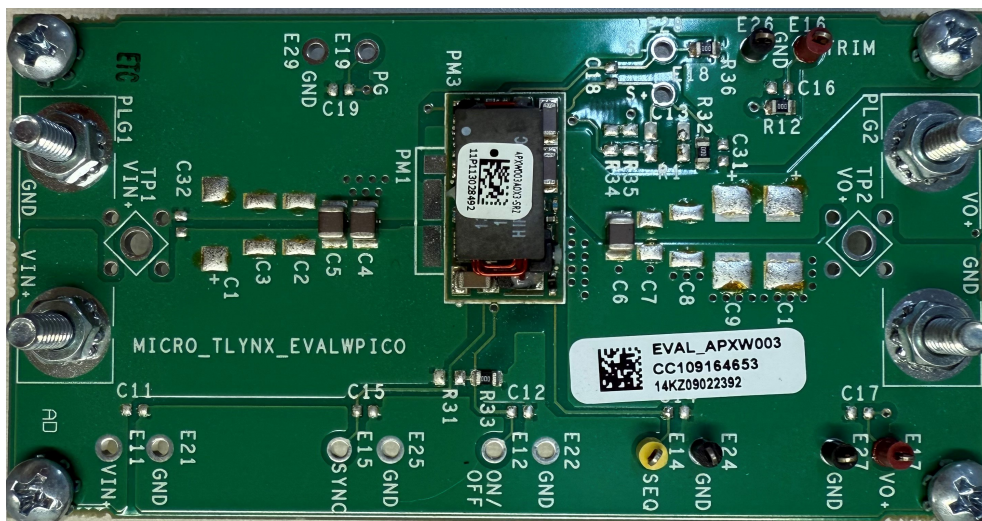
The OmniOn Power™ APXW series are wide-range POL modules that can deliver 3/5/12A in a fully configured mode. It operates over a wide input range from 9V to 36Vdc and provides precisely regulated output voltage from 3 to 18V.

The module's features include remote ON/OFF, adjustable output voltage, over current and overtemperature protection and sync capability. The Ruggedized version (-D) is capable of operation up to 105°C and withstand high levels of shock and vibration. The 12A module has SYNC capability. All Modules in the ProLynx family support Tunable Loop™.

The evaluation board is shown on the picture below. It comes pre-populated with required minimum of input and output capacitors. Numerous empty component place holders allow the board to be reconfigured to match a specific customer's application. Various test points facilitate the easy setup and monitoring of the module operation.

The board shown below is common to the APXW003 and APXW005 modules.

**Top View of Evaluation Board with APXW003 module**



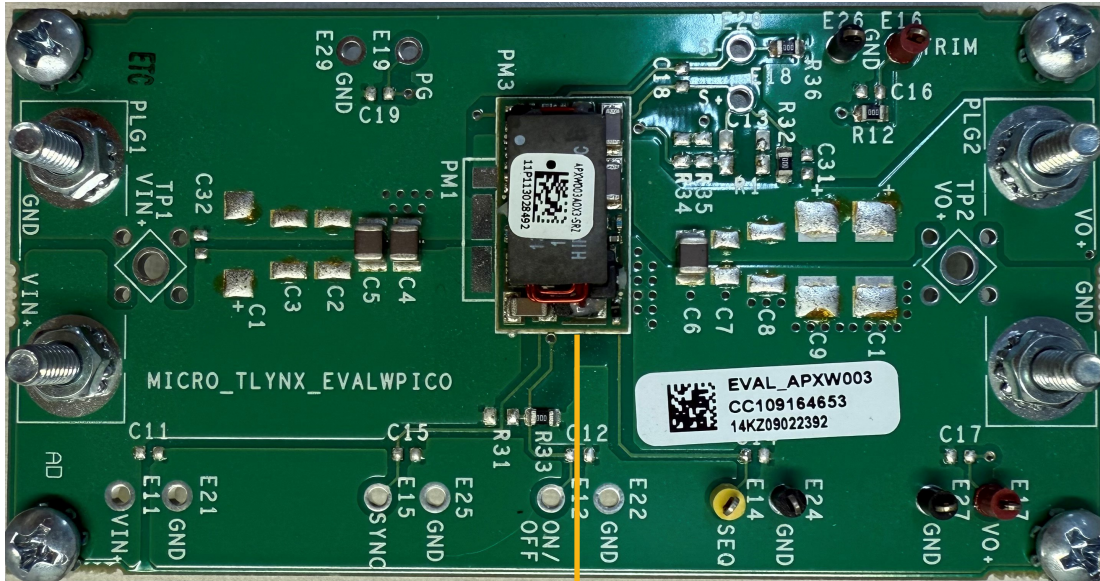
Master

Unused Pads  
for Satellites

## 1. Description of APXW003/005 Board (continued)

The evaluation board can come pre-installed with any of the APXW Modules.

**Evaluation Board with different module variants**



**OPTIONS**



**APXW003**

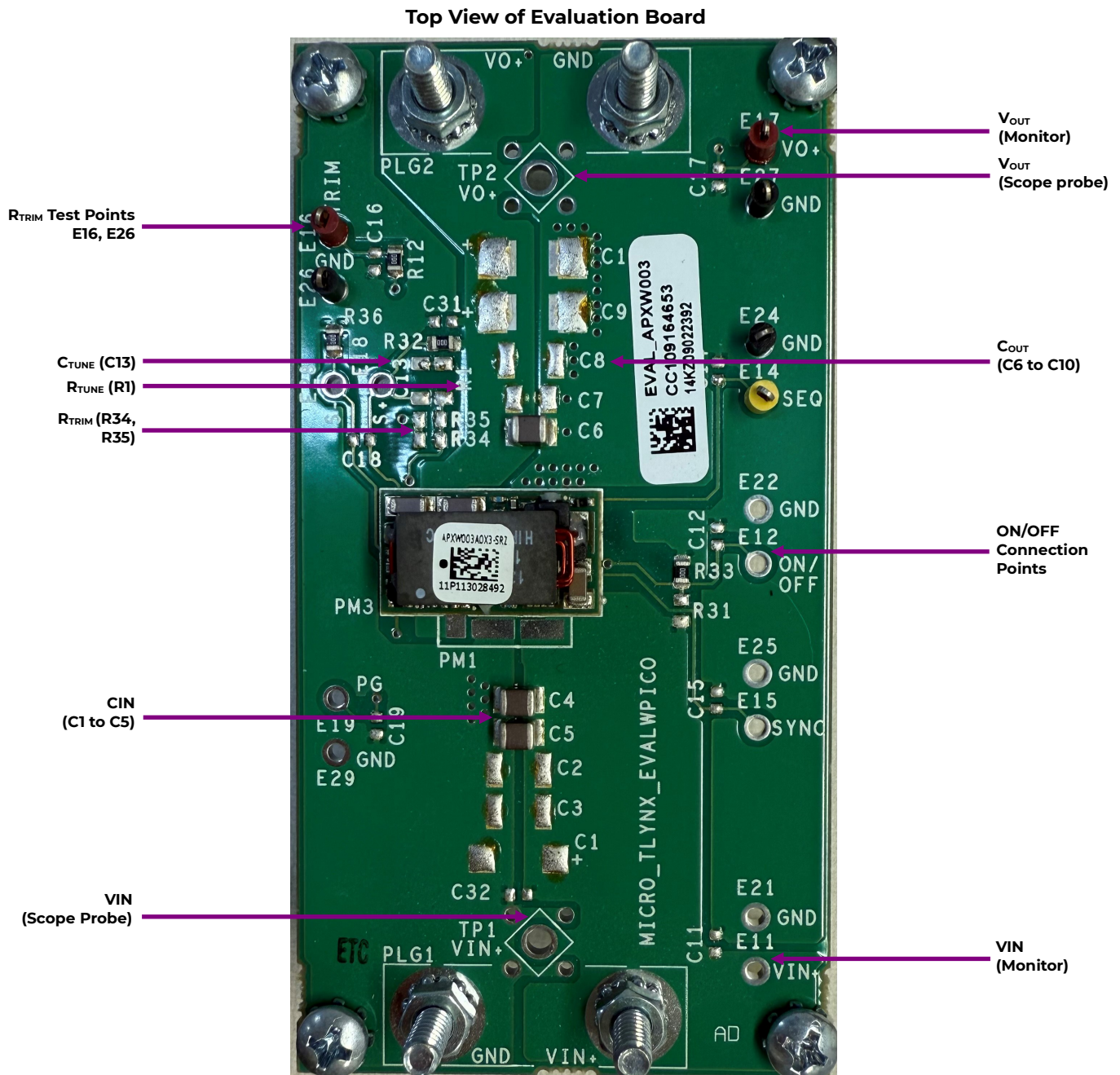


**APXW005**

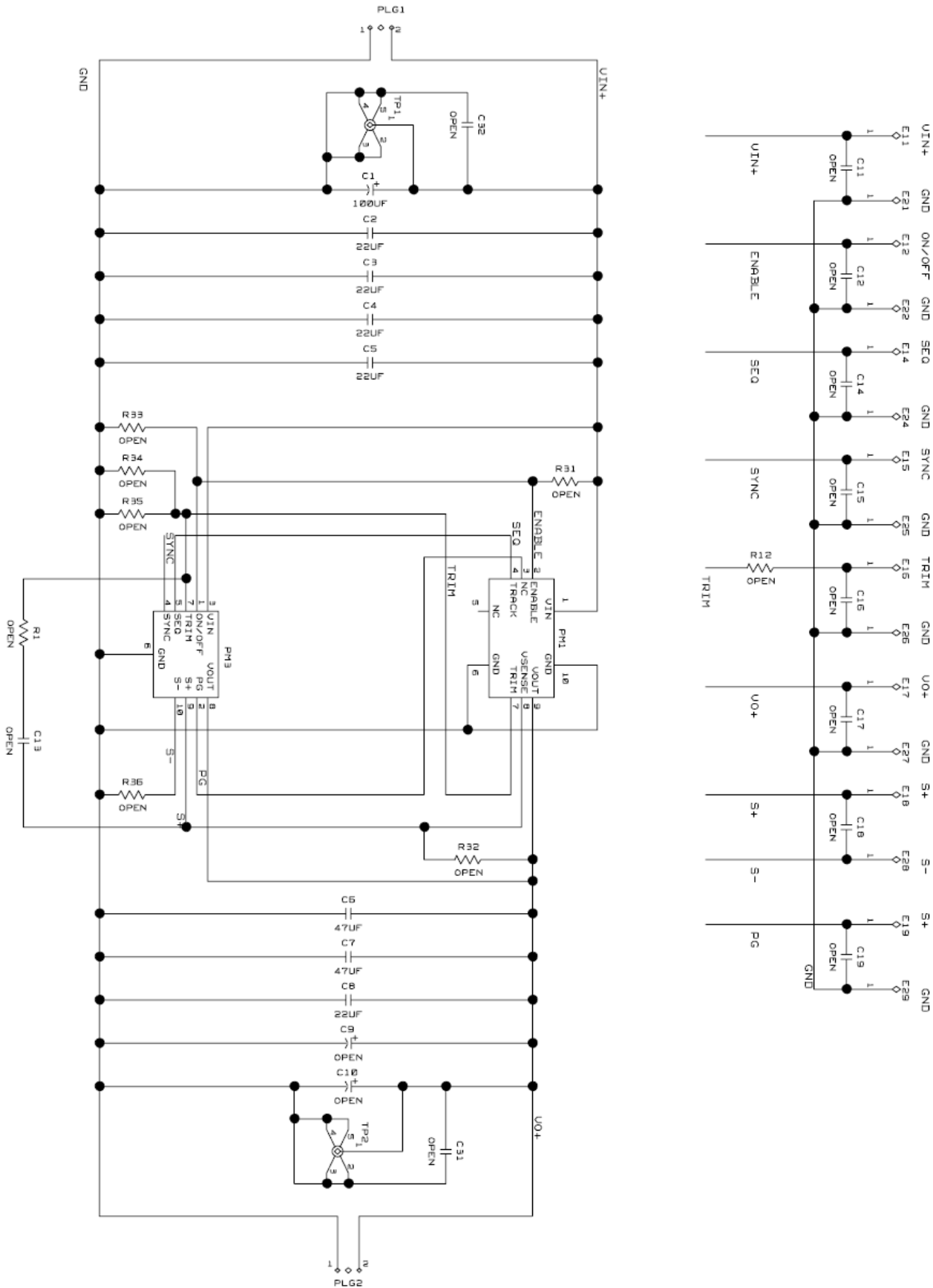
## 1. Description of APXW003/005 Board (continued)

The Installed components are as follows. The schematic on the following page shows maximum capability and includes expansion capability:

- Minimum Ceramic caps on input and output pads.
- Input, Output Connectors and Test Points.
- Holes for Probe Sockets and more Test Points.
- Additional Pads for Input, Output Capacitors, Tunable Loop components.



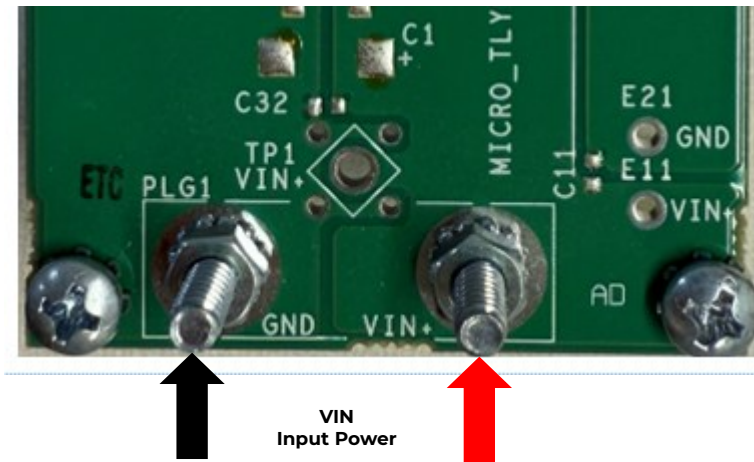
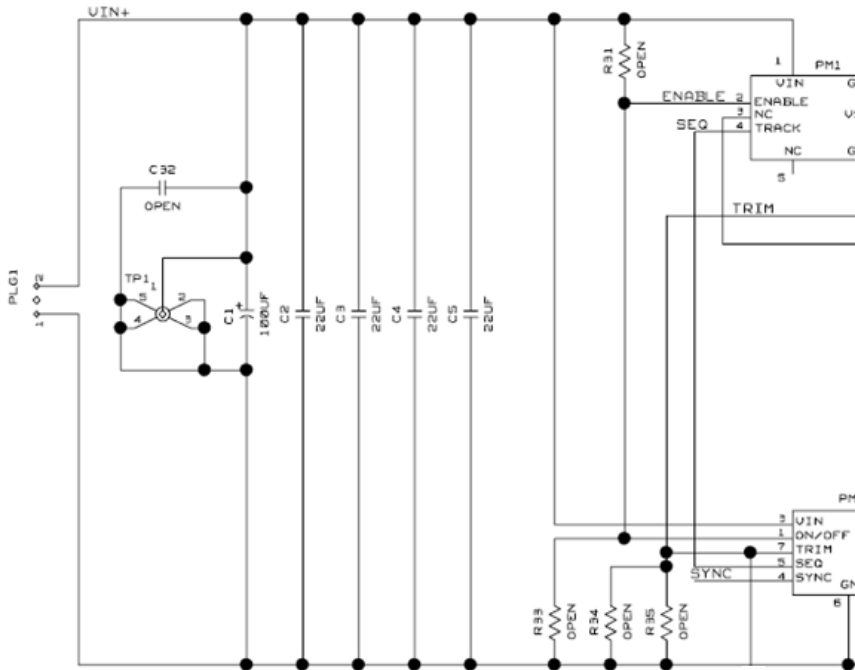
## 2. Schematic



## 2.1. Eval Board Sections

The following pictures show the input connections and components external to the module.

### 2.1.1. Input Connections



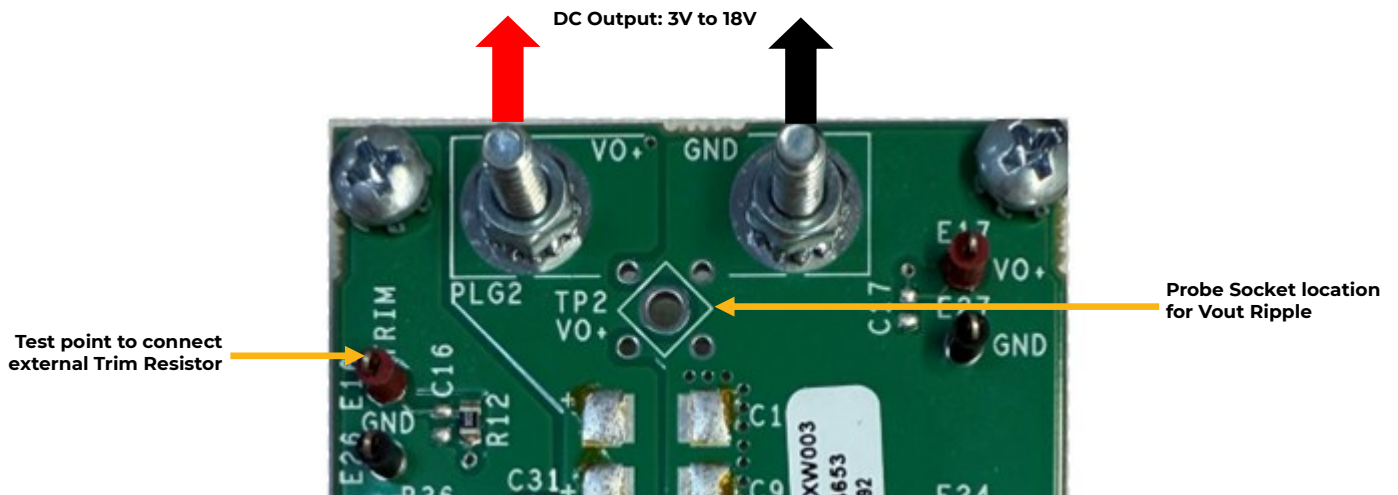
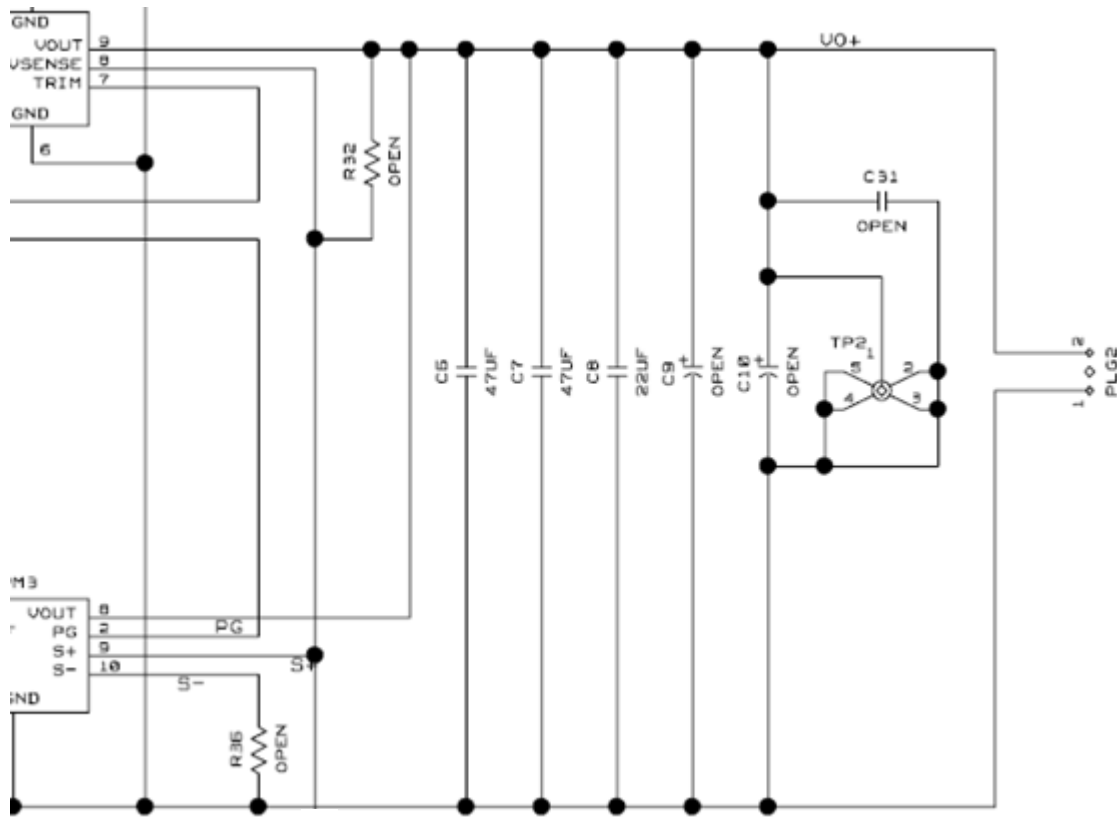
DC Input: 9V to 36V

Enable for Module Output. On/Off must be connected to Ground



## 2.1.2. Output Connections

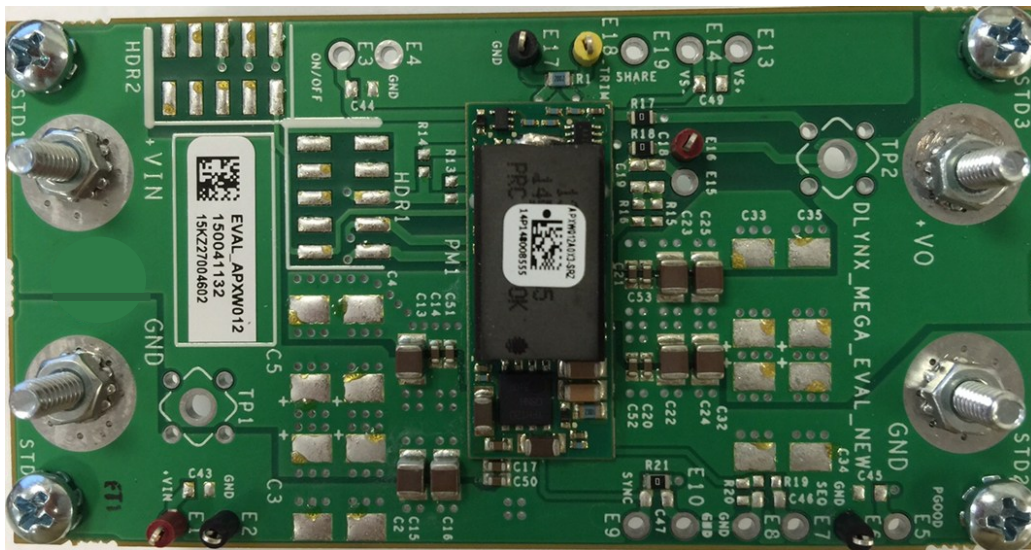
Schematic shows max capability. Board will not be populated with all components.



### 3. Description of APXW012 Board

The evaluation board is shown on the picture below. It comes pre-populated with required minimum of input and output capacitors. Numerous empty component place holders allow the board to be reconfigured to match a specific customer's application. Various test points facilitate the easy setup and monitoring of the module operation.

**Top View of Evaluation Board with APXW012 module**



Master

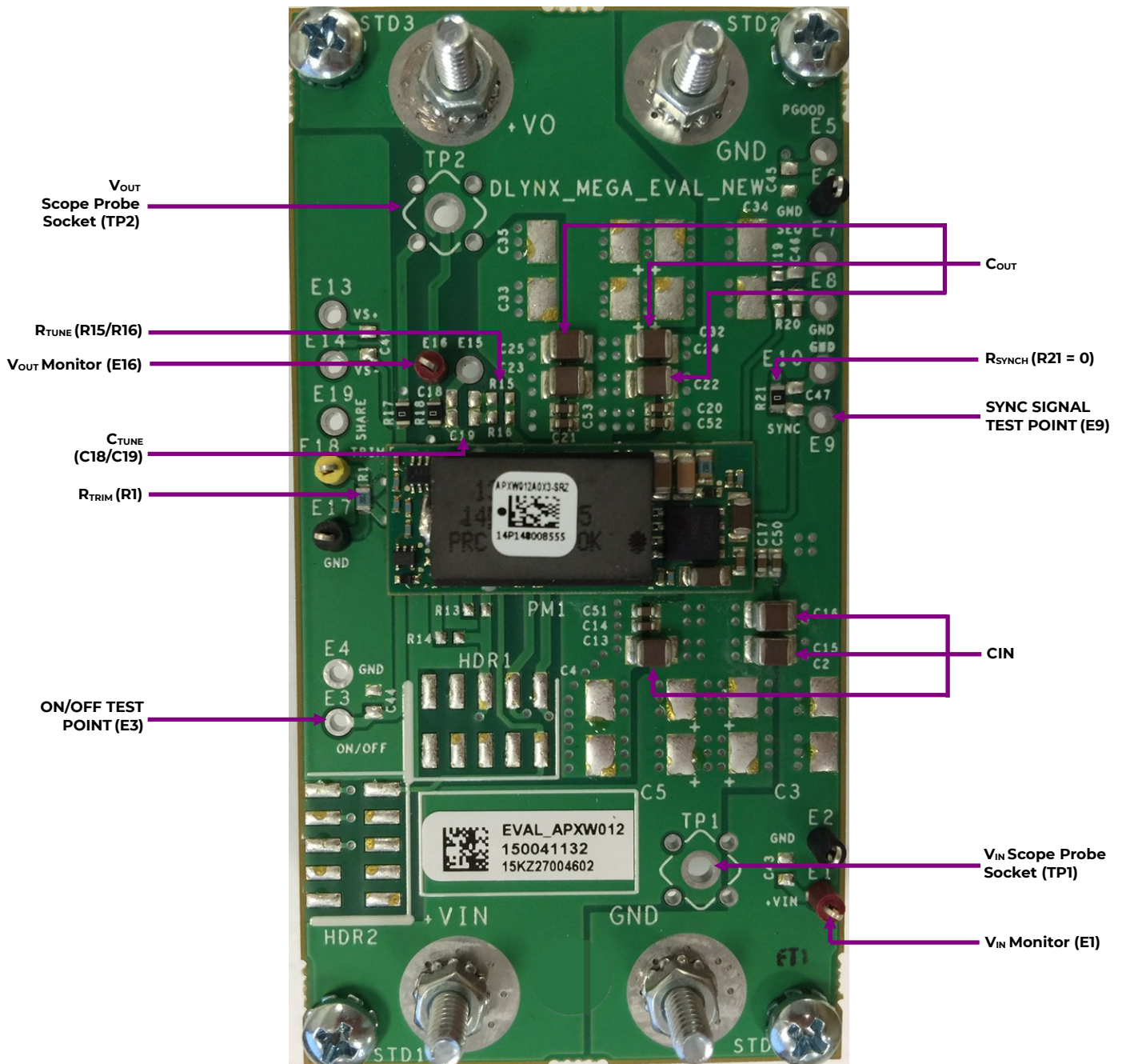
Unused Pads  
for Satellites

### 3. Description of APXW012 Board (continued)

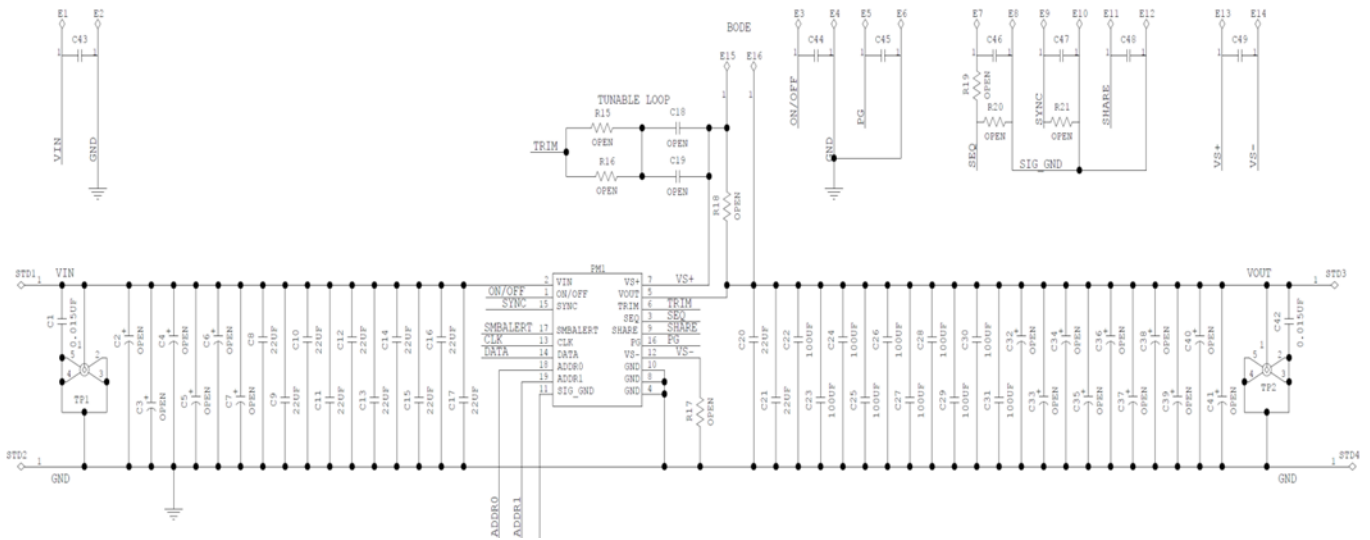
The Installed components are as follows. The schematic on the following page shows maximum capability and includes expansion capability:

- Minimum Ceramic caps on input and output pads.
- Input, Output Connectors and Test Points.
- Holes for Probe Sockets and more Test Points.
- Additional Pads for Input, Output Capacitors, Tunable Loop components.

**Top View of Evaluation Board**

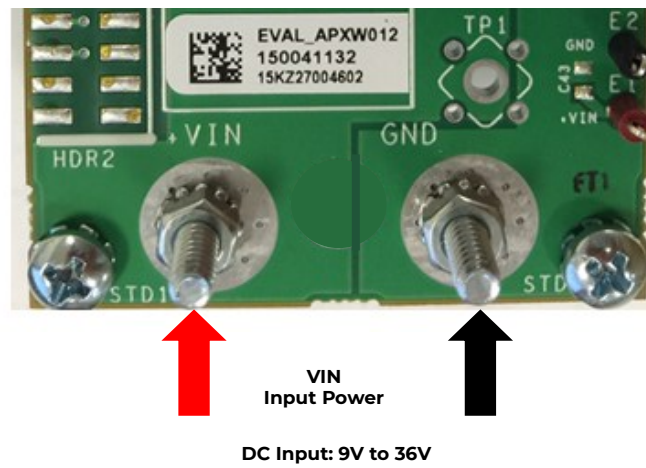
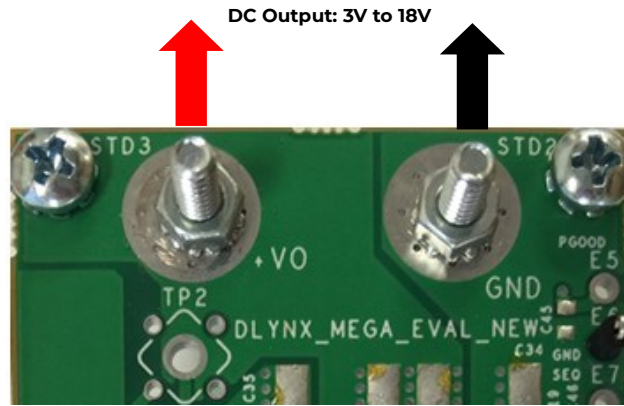


## 4. Schematic for APXW012 Evaluation Board



This is a generic schematic for digital and analog modules. Digital connections (ADDR0, ADDR1, SMBALERT, CLK, DATA) will be unused/NC for the APXW012 module. SEQ, SHARE and PG are also not supported for APXW012.

## 5. Power Connections for APXW012 Evaluation Board



## 6. Ordering Information

### Orderable OmniOn Power™ Evaluation Boards

Manufacturer Part Number	Ordering Code	Description
EVAL_APXW003A0X3-SRZ	CC109164653	Evaluation Board with APXW003 module
EVAL_APXW005A0X3-SRZ	CC109159050	Evaluation Board with APXW0054 module
EVAL_APXW012A0X3-SRZ	150041132	Evaluation Board with APXW012 module

## 7. Revision History

Revision	Date	Description of the change
1.1	12/02/2024	Initial Release
1.2	08/13/2025	Formatting Changes

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