

HDPMU™

High Density Parametric Measurement Unit for Teradyne FLEX



Superior Channel Density

- Add up to 192 independent PMU channels to your FLEX testers
- Flexible configurations
- Voltages of -2V to 6.5V
- Currents of 2ua to 32ma
- Ganged currents up to 32ma

Complete Compatibility

- Backward compatibility with existing test programs, PIBs and probe cards
- Integrated with IG-XL software
- Certified under OpenFLEX™¹

Reduce Your Cost of Test

- Low cost alternative for expanding FLEX throughput
- Fast measurement time
- Simple programming
- Fast setup time

Expand Throughput on Current Testers

Today cost efficiency is more important than ever. Many manufacturers are working on maximizing multi-site testing. Often maximization can't be done because of limited tester resources.

Salland's HDPMU gives you the ability to add up to 192 independent PMU channels on a single board. Our solution will increase parallel testing without creating complex DIB's. It offers FV, FI, MV and MI possibilities that can be used for continuity, functional or parametric tests or simply for device setup or loading.

High parallelism, full integration with the Teradyne IGXL Software, easy set-up and parallel measurement capability will reduce test costs significantly.

HDPMU Modules

The HDPMU instrument board consists of 3 PMU modules with 64 channels each and one expansion port. All PMU's can be used independently or in groups. 192 non-Kelvin, or 96 Kelvin channels are available. But also connecting up to 4 channels in parallel to increase the current capability is possible.

Each PMU is capable of parametric or Go/NoGo testing. To increase the accuracy, "focused calibration" is available.

HDPMU

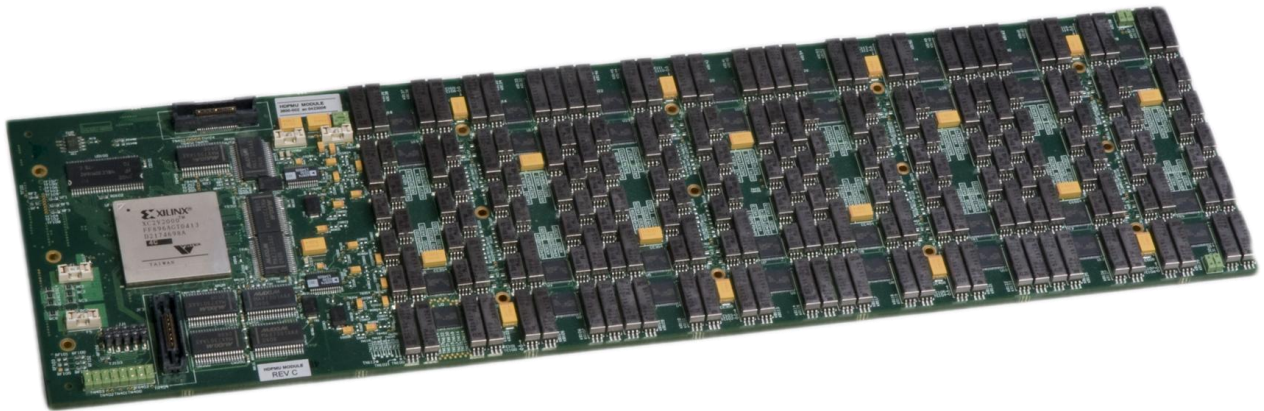


Figure 1. 64 Channel PMU Module

Fast Programming

The HDPMU board has special features to speed up the programming. It's designed to minimize the software interaction and I/O bus transfers. Some of the on board functions are:

- Local storage of setups
 - Sufficient memory exists to store more than 6000 test setups
- Hardware CAL factor compensation
 - All calibration compensation is done on board per PMU
- Channel grouping
 - Channels can be grouped together based on site and/or pin group
 - Broadcasting of commands to sites and groups
- Go/NoGo testing
- Parallel access to 24 blocks of 8 PMUs

All these functions support to reduce the setup and measurement times of the HDPMU board. Most functions are hidden from the application programmer and will be automatically utilized. Test setups for all 192 PMUs can be defined upfront and loaded into the HDPMU board memory at the beginning of the test LOT. During subsequent testing only a minimal selection of a stored setup is required to load the full setup for all 192 PMUs.

Ready for the Future

The main board has space and connections available for an extension module. The optional extension module is directly connected to the 192 DIB Force lines and ground lines and can be used for any future options.

Reputation for Quality, Reliability and Support

Salland is respected by demanding semiconductor manufactures, OSATs, and ATE vendors for delivering outstanding instruments that are fully compatible with leading ATE platforms. The HDPMU is supported by Salland Engineering on a worldwide basis.

Note 1. [Teradyne's OpenFLEX Program](#)

About Salland Engineering

Salland Engineering International B.V. is a leading supplier of test solutions for the semiconductor industry. Our solutions are delivered via a unique combination of hardware, software, test applications services and in-depth expertise. We enable our customers to achieve lower cost of test, higher quality and reliability, improved test floor efficiencies, faster time to market and streamlined interfaces with their supply chain. Since 1992, Salland has delivered thousands of production proven results to leading integrated device manufacturers (IDMS), fabless semiconductor manufactures, ATE vendors and outsourced test and assembly services (OSATs) around the world. We are consistently profitable and presently employ over 100 people. Salland is headquartered in The Netherlands with additional development centers in Texas. We have worldwide sales and support centers in Texas, California, Italy, UK, Singapore, Japan, Korea, and Taiwan. [Click here for Trademarks](#) of Salland Engineering. Visit www.salland.com