

## Project Authorization Request

PAR Status: New PAR

PAR Approval Date: \_\_\_\_\_

PAR Signature Page on File: Yes

1. **Assigned Project Number:** P1155.2
2. **Sponsor Date of Request:** 2006-02-17
3. **Type of Document:** Standard for
4. **Title of Document:** VME eXtensions for Instrumentation (VXI) Upgrade for Virtual Power Source Module Integration and other Enhancements
5. **Life Cycle:** Full-Use
6. **Type of Project:**
  - 6a. **Is this an update to an existing PAR?** No, but is related to the existing 1155 and 1155.1 PAR. VXI 1155 std is the basis of the specification, that is further enhanced by the 1155.1 upgrade.
  - 6b. **The Project is a:** New Standard
7. **Working Group Information:**

**Name of Working Group:** IEEE-1155 VXI Standard Working Group Subcommittee  
**Approximate Number of Expected Working Group Members:** 15
8. **Contact information for Working Group Chair:**

**Name of Working Group Chair:** Michael Stora  
**Telephone:** +1 973 299 8321 **FAX:** +1 973 299 9757  
**Email:** mjs@sysintech.com
9. **Contact information for Co-Chair/Official Reporter, Project Editor or Document Custodian if different from the Working Group Chair:**

**Name of Co-Chair/Official Reporter, Project Editor or Document Custodian:**

\_\_\_\_\_  
**Telephone:** \_\_\_\_\_ **FAX:** \_\_\_\_\_  
**Email:** \_\_\_\_\_

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**10.a Contact information for Sponsoring Society or Standards Coordinating Committee:**

**Name of Sponsoring Society and Committee:** IEEE Instrumentation and Measurement  
Society TC8-Automated Instrumentation

**Name of Sponsoring Committee Chair:** Michael J. Stora

**Telephone:** +1 973 299 8321

**FAX:** +1 973 299 9757

**Email:** mjs@sysintech.com

**Name of Liaison Rep. (if different from the Sponsor Chair):** Stephen F Adam

**Telephone:** +1 650-968-4900

**FAX:** +1 650-960-1398

**Email:** s.adam@ieee.org

**10.b Contact information for Co-Sponsoring Society or Standards Coordinating Committee:**

**Name of Co-Sponsoring Society and Committee:** IEEE Computer Society, Microprocessors  
and MicrocomputersCommittee

**Name of Co-Sponsoring Committee Chair:**

\_\_\_\_\_  
**Telephone:** \_\_\_\_\_ **FAX:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**Name of Co-Sponsor Liaison Rep. (if different from the Co-Sponsor Chair):**

\_\_\_\_\_  
**Telephone:** \_\_\_\_\_ **FAX:** \_\_\_\_\_

**Email:** \_\_\_\_\_

**11. The Type of ballot is:** Individual Sponsor Ballot

**Expected Date of Submission for Initial Sponsor Ballot:** October 2007

**12. Projected Completion Date for Submittal to RevCom:** July 2008

**13. Scope of Proposed Project:**

The Virtual Power Source Module standard expands upon the electrical and mechanical specifications of the IEEE-1155 VME eXtensions for Instrumentation (VXI) Standard, as further enhanced by the 1155.1 std. The power module specification conforms to the 1155 standard C-size VXI footprint and is pluggable to VXI backplane through a newly defined power interface connector and controlled via 1155.1 std serial bus specifications adopted from VME International Trade Association (VITA) Standard 41.3 and LXI protocol. The virtual power source standard defines a minimum seven output capability conforming to VXI system power requirements, with a common input of 48VDC input. A front panel connector and related I/O is also defined for the power source to support Unit-Under-Test (UUT) power needs.

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- a. Is the completion of this document contingent upon the completion of another document?** Yes. IEEE-P1155.1 is being developed in advance to the 1155.2 std.

**14. Purpose of Proposed Project:**

Defining a virtual power source in same form factor as the VXI module with pluggable backplane I/O, and system/UUT sourcing, is an important objective of the standard. Under the power module specifications the test industry will benefit from greater fault-tolerance, redundancy, reconfigurability, and virtual capabilities. The specification also reduces the number of assets, footprint, cabling and related costs.

**15. Reason for the Proposed Project:**

The standard provides an “open” definition for the pluggable power industry, as it relates to VME/VXI technology. This supports the interests of suppliers, integrators, and users of the technology.

**16. Intellectual Property:**

- a. Has the IEEE-SA policy on intellectual property been presented to those responsible for preparing/submitting the PAR?** Yes 2006
- b. Is the sponsor aware of copyright permissions needed for this project?** No
- c. Is the sponsor aware of trademarks that apply to this project?** No
- d. Is the sponsor aware of possible registration activity related to this project?** No

- 17. Are there other documents or projects with a similar scope?** No

- 18. Is there potential for this document (in part or in whole) to be adopted by another national , regional or international organization? Do not know at this time**
- 19. Will this project result in any health, safety, or environmental guidance that affects or applies to human health or safety? No**
- 20. Sponsor Information**
- a. Is the scope of this project within the approved/scope/definition of the Sponsor's Charter? Yes**
  - b. The Sponsor's procedures have been accepted by the IEEE-SA Standards Board Audit Committee? Yes**
- 21. Additional Explanatory Notes: (Item Number and Explanation)**