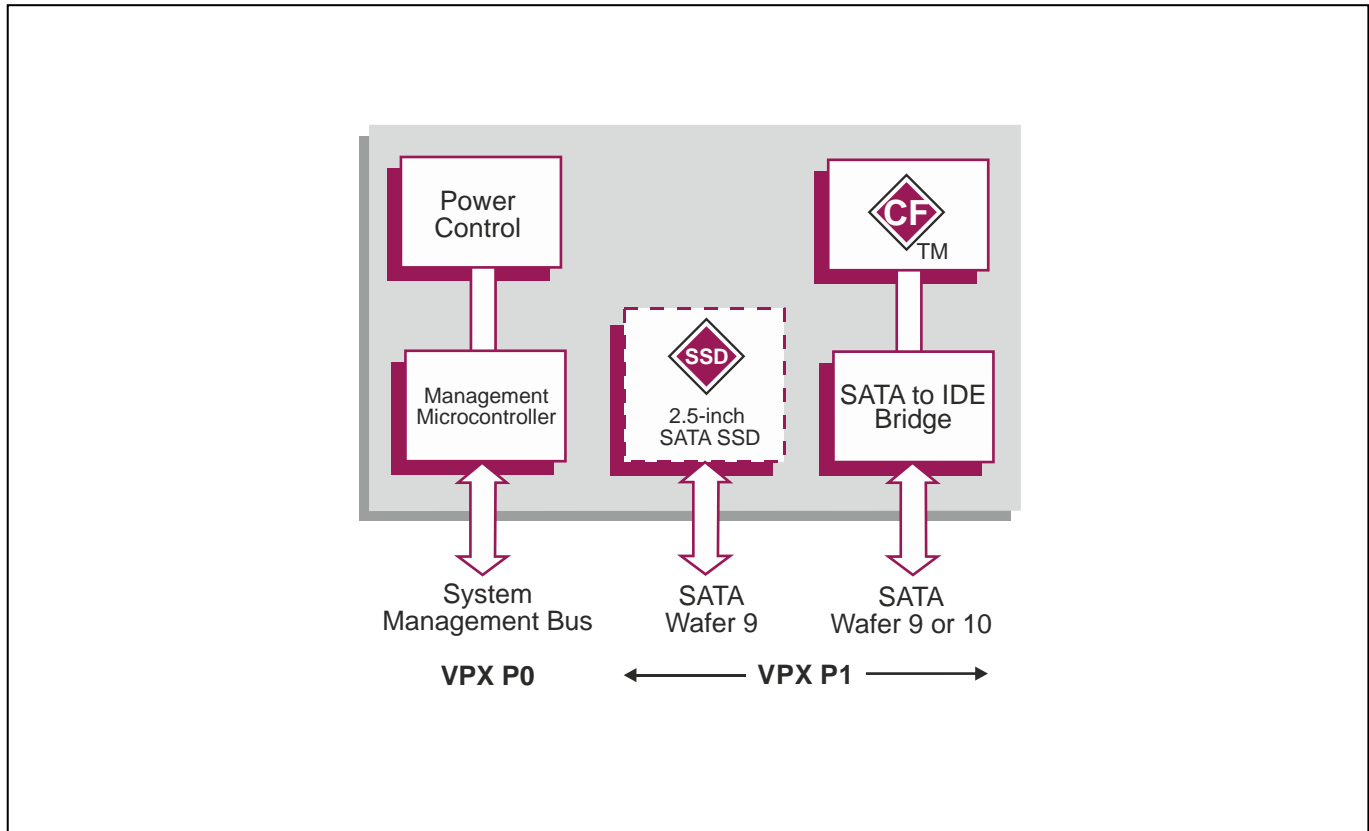


## 3U VPX-REDI Mass Storage Module

### Key Features

TR MS1/321-RC is a mass storage module providing a flexible solution for designers wishing to add a 2.5-inch SATA mass storage drive to a 3U VPX system.

- This module is specifically enhanced for use in rugged applications and environments, such as:
  - defense, industrial control, telecommunications, telemetry and aerospace applications
- A CompactFlash™ site is also supported by this module
- Connects via rear SATA ports



## VPX-REDI Mass Storage Module

- 3U VPX-REDI Mass Storage Module supports:
  - a single 2.5-inch SATA300 solid-state drive (SSD)
  - Type-I CompactFlash® site
  - direct SATA connections via backplane
- conduction-cooled to VITA 48.2
- conformally coated
- compatible with several OpenVPX module profiles
- for non-rugged VPX (N-Series) versions:
  - commercial air-cooled
  - see TR MS1/321 datasheet

## CompactFlash Site

- CompactFlash™ Type-I site available:
  - implemented via SATA to EIDE interface connected to VPX P1 wafer 9 or 10

## VPX Backplane Interface

- P0 and P1 support OpenVPX configuration
- compatible with OpenVPX module (VITA 65) profiles:
  - MOD3-STO-2U-16.5.1-1
  - MOD3-STO-2U-16.5.1-2

## System Management

- System Management interface:
  - implements the SMO-1 interface
- on-board System Management Controller
- supports 8 Kbytes of non-volatile memory

## Electrical Specification

- maximum current figures (including SSD):
  - +5V VS3 @ 0.5A, voltage +5% / -2.5%
  - +3.3V VS2 @ 0.2A, voltage +5% / -2%
  - +3.3V AUX @ 0.2A, voltage +5% / -5%
- +12V AUX and -12V AUX are not required

## Safety

- PCB (PWB) manufactured with flammability rating of UL 94V-0

## Environmental Specification

- operating temperature (at card edge):
  - VITA 47 Class CC4, -40°C to +85°C
  - conduction-cooled (VITA 48.2)
- non-storage temperature:
  - VITA 47 Class C4, -55°C to +105°C
- operating altitude:
  - -1,000 to 50,000 feet (-305 to 15,240 meters)
- 5% to 95% Relative Humidity, non condensing

## Mechanical Specification

- 3U VPX form-factor (VITA 46.0, VITA 48.0):
  - 3.9 inches x 6.3 inches (100mm x 160mm)
- slot widths (VITA 48.0):
  - 0.8 inches VPX-REDI Type 2, RCT-Series
  - 0.85 inches VPX-REDI Type 1, RCS-Series, Type 1 Two Level Maintenance (VITA 48.2)
- connectors to VITA 46.0 for P0, P1 and P2
- operating mechanical:
  - shock - VITA 47 Class OS2, 40g
  - random vibration - VITA 47 Class V3, 0.1g<sup>2</sup>/Hz



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