V&G 6U VPX memory card has onboard 8 modules of NAND Flash SSD which has independent controller in each module. Each module can work independently and can be RAID to have a maximum output performance and capacity. The 8 modules will have a total of 16 TB which is managed and controlled by SATA 6Gbps controller. The SSD controller has built-in modules such as bad block management, loss balance and error correction to ensure high operating speed reliability and reduce load on the host processor.

The 8 SSD modules are connected into RAID Controller for optimum performance (RAID0 striping), highest data integrity (RAID 1 – mirroring), and support RAID 5, 6, 10, 50 and JBOD functions. V&G 6U VPX memory card in line with the standard VITA46, VITA48, VITA65, support PCIe3.0 x8, the military industry applications in high-end storage systems.

FEATURES
- Built-in ECC (Error Correction Code) wear-leveling and bad-block management functionality.
- Support write protect functionality
- Support One-Key Intelligent Destruction
- Support various operating systems: Windows, Linux, Solaris, China Kylin, and VxWorks
- PCIe 3.0 x8 (VPX)
  - Built-in RAID controller and hardware RAID
  - Support RAID 0, 1, 5, 6, 10, 50 and JBOD.
  - Complete SATA, PCI/PCIe convert to SATA controller and NAND Flash
  - SSD basic solution

APPLICATIONS
- Data Recorder (RADAR and Flight Recorder)
- Data Acquisition System
- Military Defense and Aerospace
- Rugged Systems (Vehicles, Space and Naval)
SPECIFICATIONS

Dimension
- Size: 233.35 mm x 160.00 mm x 25.40 mm
- Weight: 4 to 2 kg

Capacity
- MLC: 2TB - 16TB
- SLC: 1TB - 8TB

RAID
- Support RAID 0,1,5,6,10,50 functions

Input Voltage and Power Consumption
- Input Voltage: 5V/12V ± 5%
- Power Consumption: 80W(Active) / 15W(Idel)

Operating System and Software
- Windows, MAC, Linux, Unix, Solaris, China Kylin, and VxWorks...

Performance
- Sequential Read: 5 GB/S
- Sequential Write: 4 GB/S
- Random Read (4k) IOPS: 200,000
- Random Write (4k) IOPS: 160,000

Reliability
- MTBF: 2,000,000 Hours

Operating Environment
- Operating Temperature: W-temp: -60°C - 85°C
- C-temp: 0°C - 70°C
- Storage Temperature: -55°C - 95°C
- Humidity: 5% - 95% (condensing)
- Vibration: 10 G (10 to 2000Hz)
- Shock: 1500 G at 0.5ms