



# SBC347A

## 5th Generation Intel® Core™ i7 Based Rugged VPX Single Board Computer



### Features

- Single slot 3U VPX single board computer
- 5th Generation Intel® Core™ i7 quad core processor (6 MB shared cache)
- Two channels of soldered DDR3L SDRAM with ECC up to 16 GB
- Up to 32 GB NAND Flash
- Rear I/O
  - 2x 10GBASE-T ports (also configurable as 2x 1000BASE-T)
  - 1x VGA port
  - 1x DVI port
  - 3x SATA 6 Gb/s ports
  - 2x COM ports
  - 4x USB 2.0 ports
  - Up to 8x GPIO
- Five levels of ruggedization (convection and conduction cooling variants)
- AXIS and Deployed Test Software
- Microsoft® Windows®, Open Linux® and VxWorks® support

The SBC347A Rugged Single Board Computer (SBC) from GE Intelligent Platforms features the high performance, highly integrated 5th Generation Core i7 processor platform from Intel.

The 5th Generation Core i7 offers integrated graphics and memory controller plus quad core processing up to 2.7 GHz all in one device. Coupled with the Mobile Intel QM87 Express Chipset, this provides an unmatched level of I/O bandwidth for both on-board and off-board functions.

### Features of the 5th Generation Core i7

- Graphics support for DX11.1, OpenCL 1.2, OpenGL 3.2
- 5 to 15% CPU performance boost over 4th generation
- Intel TurboBoost Technology
- Intel AVX 2.0 extensions and AES-NI instructions
- Hardware-assisted security features
- Hyper-Threading Technology – two threads per core

The SBC347A is designed to offer maximum PCIe® bandwidth to the backplane with a total of 14 (x8, x4, x2) PCIe lanes across the P1 and P2 connectors.

Memory resources include 16 GB DDR3L SDRAM, up to 32 GB NAND Flash (SSD), 32 MB BIOS Flash and 16 MB BIOS backup Flash.

The SBC347A is designed to meet the requirements of a wide range of applications from industrial through to fully rugged defense and aerospace programs. It offers extended temperature capability and a range of air- and conduction-cooled build levels.

A rich software choice is planned for the SBC347A, including comprehensive Deployed Test Software (FSP-enabled BIT, and BCS) plus operating system support for Microsoft Windows 7, Open Linux (Fedora), Red Hat® Enterprise Linux, Wind River Linux, and VxWorks. Examples and assistance are also available for integrating 'chain of trust' operation (from power-up to application start), plus Wind River's FSP-enabled VxWorks Boot Loader, into system scenarios.

