

### Features

- Six PCI Express® x1 (5 slots, 1 PCIe Mini Card slot)
- PCIe-to-PCI bridge, two PCI slots
- SDVO ADD2 card slot
- LPC based Super I/O (enable/disable)
- SDIO/MMC support, multiplexed on GPIO
- Dual BIOS (both LPC and SPI)
- Compatible with PICMG® COM Express® Carrier Design Guide

### Specifications

#### Form Factor

|                       |                                     |
|-----------------------|-------------------------------------|
| Core Module Interface | PICMG® COM Express® Revision 1.0    |
|                       | Supports Type 1 and Type 10 pinouts |
| Dimensions            | 305 mm x 240 mm (AT/ATX)            |
| Expansion Buses       | Five PCI Express® x1 slots          |
|                       | Two 32-bit PCI v2.3 slots           |
|                       | One PCI Express® Mini Card slot     |
|                       | One SDVO ADD2 slot                  |
|                       | LPC bus header                      |

#### BIOS / Debug

|                |  |
|----------------|--|
| POST LEDs      | Onboard diagnostics for BIOS POST code data and address on LPC bus |
| Secondary BIOS | Onboard sockets for secondary LPC & SPI flash                      |

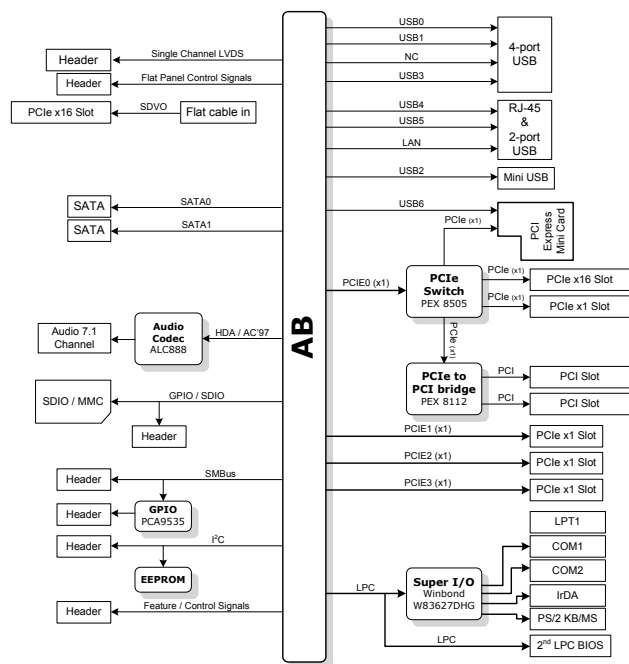
#### Active Components

|                           |   |
|---------------------------|---|
| PCI Express Switch        | PLX PEX8505 switch with PCIE0 input from module           |
| PCI Express to PCI Bridge | PLX PEX8112 bridge with PCIe x1 input from PEX8505 switch |
| Super I/O                 | Winbond W83627DHG on LPC bus                              |
| Audio Codec               | Realtek ALC886 High Definition Audio Codec                |
| Digital I/O               | I <sup>2</sup> C to GPIO bridge PCA9535                   |

#### Connectors

|                    |   |
|--------------------|---|
| COM Express        | Connector AB only, one 220-pin (Type 1)   |
| LVDS               | Onboard 34-pin header   |
| Audio              | Mic/Line-in/Line-out on I/O panel   |
| SATA               | Two SATA connectors   |
| PCIe Mini Card     | One socket onboard (USB + PCIe x1)  |
| LAN                | 10/100/1000BASE-T compatible RJ45 on I/O panel  |
| USB 2.0            | Five on I/O panel, one Mini-USB (client only) and one through PCIe Mini Card              |
| Serial Port        | Two DB-9 on I/O panel   |
| Parallel Port      | One header onboard  |
| Smart Battery      | One header for Smart Battery management communications (connects to ADLINK BattMan board) |
| KB/Mouse           | Two 6-pin mini DIN (on rear I/O panel)  |
| SDIO/MMC           | SD socket for bootable storage or function extension                                      |
| Feature Connectors | SMBus, I <sup>2</sup> C, module control signals, flat panel control signals               |
| Miscellaneous      | Reset, Power LED, HDD LED, Buzzer   |
| Power              | Standard ATX connector  |
| Switches           | Onboard RESET button and ATX mini switch  |

### Functional Diagram



### Ordering Information

#### Modules

| Model Number | Description/Configuration  |
|--------------|--|
| nanoX-BASE   | COM Express® Type 1/10 Reference Carrier Board with onboard PCIe to PCI bridge |