



COM Express Module, Type 6, 1.8GHz Intel Atom N2800

Part: TCA/N2800 | **Model:** Atom COM Express Module

The TCA/N2800 COM Express Type 6 module features an Intel Atom® N2800 dual-core 1.8GHz processor and supports up to 4GB of DDR3 RAM. The module offers low power consumption (TDP 6.5W) and can operate fanless over a wide operating temperature range of 0°C to 60°C ambient. Standard features include integrated Gigabit Ethernet controller, up to five PCI Express X1 lanes, two SATA II (3Gb/s) interfaces, eight USB 2.0 ports, LPC bus, and I2C bus. The module includes two Digital Display Interfaces (DDI) for DisplayPort, HDMI or DVI displays.

Sealevel specializes in COM Express carrier boards built to your specific application requirements. Our extensive library of proven I/O circuits including serial, analog, and digital functionality simplifies the design process and can be easily optimized to meet the specific I/O count, voltage ranges and connector types required for your application. COM Express development boards are also available to allow software development to begin immediately while the custom carrier board is designed.

Turn to Sealevel's custom capabilities for expertise in electrical, mechanical, software, environmental stress screening, project management, and compliance & certification. Call us today to discuss the design capabilities, reliability improvements and design control advantages that a Sealevel COM Express carrier board or system design will bring to your next product.

Features & Specifications

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Features

- COM Express Compact Type 6 connector layout
- Includes 1.8GHz Intel Atom N2800 dual-core processor
- Maximum 4GB DDR3 1066MHz RAM via 204-pin SODIMM
- Integrated Intel NM10 Express chipset CG82NM10 PCH, TDP 2.1W
- Integrated Gigabit Ethernet controller
- I/O interfaces can include up to 5x PCI Express, 2x SATA II, 8x USB 2.0, 3x USB 3.0 (optional, uses 1x PCIe lane), LPC bus, I2C bus (fast mode, 400kHz, multi-master)
- Digital high definition audio interface with multiple codec support
- Integrated graphics with two independent display pipes supporting DirectX 9, Pixel Shader v3.0 and OpenGL 3.0
- Two Digital Display Interfaces (DDI), via 2x DisplayPort 1.1, TMDS (DVI, HDMI 1.3a)
- CRT interface includes 350MHz RAMDAC with resolutions up to 1920x1200
- Board controller includes multi-stage watchdog, non-volatile user data storage, BIOS setup data backup, and power loss control
- Embedded BIOS features AMI Aptio UEFI with 4MB serial SPI firmware flash
- Supports ACPI 3.0 power management with battery backup
- Supports Microsoft Windows and Linux operating systems
- Wide temperature operation from 0°C to 60°C ambient

Specifications

BIOS	AMI Aptio UEFI
Chipset	Intel NM10 Express
CPU Type	Intel Atom
CPU	1.8GHz Intel Atom Dual-Core N2800
Dimensions	3.74" (L) x 3.74" (W)
Extended Temperature	Call for Options
Humidity Range	10 – 90% Relative Humidity, Non-Condensing
Max RAM	4GB DDR3 1066MHz via 204-pin SODIMM Slot
Max Video	1920x1200 @ 60Hz
Operating Temperature	0°C to 60°C (32°F to 140°F)
Power Requirement	TDP 6.5W
Storage Temperature	-20°C to 80°C (-4°F to 176°F)