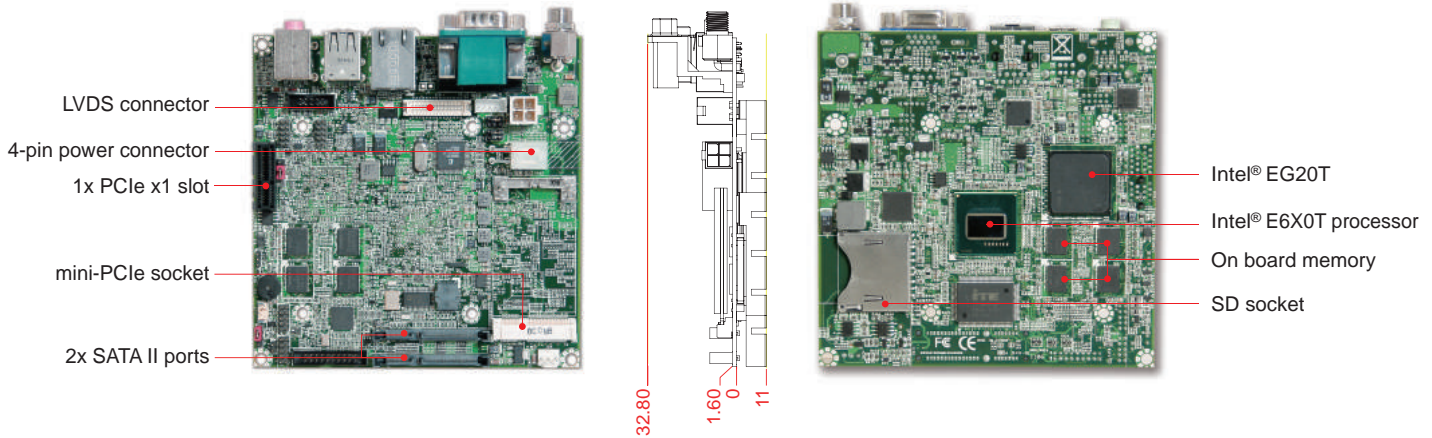


NANO-6040

Intel® Atom™ E6X0T processor based
NANO-ITX Board with dual display,
Gigabit Ethernet, Audio, USB, CAN,
SD and SATA

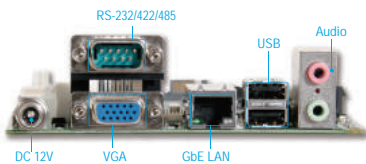


NANO-6040 adopts Intel's latest wide temperature Atom™ processors, which is for the small ultra low power form factor. The new architecture integrates the 3D graphics engine and memory controller making it suitable for critical environments. The board also comes equipped with a CAN bus connector for vehicle application.

FEATURES

- Intel® Atom™ E6X0T processor based on Intel® EG20T platform
- Dual independent display: VGA and single channel 18/24-bit LVDS
- 1x SD socket, 2x SATA II ports, 1x Gigabit Ethernet
- Supports TPM function for more secure platforms
- 1x mini-PCIe socket and PCIe x1 slot for Expansion
- Supports DC 12V input

REAR/I/O



ORDERING GUIDE

AB1-3745	(R).NANO-6040-1600-1024 Nano-ITX ESB.Intel® Tunnel Creek E680T 1.6GHz.w/1GB SDRAM/VGA/LVDS/GbE LAN/Audio/USB
AB1-3746	(R).NANO-6040L-1000-1024 Nano-ITX ESB.Low profile type.Intel® Tunnel Creek E640T 1.0GHz.w/1GB SDRAM/VGA/LVDS/GbE LAN/Audio/USB
AB1-3747	(R).NANO-6040L-1600-1024 Nano-ITX ESB.Low profile type.Intel® Tunnel Creek E680T 1.6GHz.w/1GB SDRAM/VGA/LVDS/GbE LAN/Audio/USB

PACKING LIST

One NANO-6040 NANO-ITX Main Board
One passive Heatsink
One Installation CD

GENERAL

Processor	- Intel® Atom™ E620T (600MHz,3.3W), E640T (1.0GHz, 3.6W), E660T(1.33GHz, 3.6W), E680T (1.6GHz, 4.5W) with 512K L2 Cache in FCBGA676 - FSB: 400MHz - Supports Intel® Virtualization Technology (VT-x), Intel® Thermal Monitoring Technology, Enhanced Intel SpeedStep® Technology, Hyper-Threading Technology
Chipset	Intel® Platform Controller Hub EG20T (1.55W)
BIOS	AMI UEFI BIOS
Memory	Supports up to 2GB DDR2 667/800 MT/s on board SDRAM
Storage Devices	- 2x SATA II - 1x SD socket supports 24MHz (SDIO Revision 1.1)
Watchdog Timer	Programmable via S/W from 1 sec. to 255 sec.
Hardware Monitoring	- Temperature (CPU & System) - Voltage (CPU Vcore, VBAT, 5VSB, 12V, 5V, 3.3V)
Expansion Interface	-1x PCIe x1 slot (Gen 1, 2.5 GT/s) -1x mini-PCIe socket (Gen 1, 2.5 GT/s)

I/O INTERFACE

Super I/O	ITE IT8783F
Audio	- Intel® processor built-in High Definition Audio up to 192-kHz 24-bit - Realtek ALC892-GR HDA codec - Audio Jack on rear I/O with Line-out and Mic-in (NANO-6040) - Audio Jack on rear I/O with Line-out (NANO-6040L) - Audio on board header with Line-out and Mic-in
Ethernet	- Intel® WG82574IT Gigabit Ethernet controller - 1x RJ45 connector on rear I/O
Serial Port	- 1x RS-232/422/485 port with DB-9 connector on rear I/O (NANO-6040) - W/o serial port on rear I/O (NANO-6040L)
USB	- 2x USB 2.0 ports on rear I/O - 4x USB 2.0 ports on board with pitch 2.0 header - 480 Mb/s bus handles high-speed/full-speed/low-speed data ranges
GPIO	On board programmable 8-bit Digital I/Os
Others	TPM header, I2C header, CAN bus header

DISPLAY

Graphic Controller	- Intel® processors integrated graphic engine supports frequency up to 400MHz, OpenGL ES2.0, OpenVG 1.1 - Chronitel CH7317B-TF SDVO to RGB DAC
Display Interface	- LVDS: single channel 18/24-bit LVDS up to 1280x768 (WXGA) - CRT: up to 1280 x1024 (SXGA)

Mechanical & Environment

Dimension	120mm(L) x 120mm(W) ; 4.72"(L) x 4.72"(W)
Power Supply	DC-12V input
Environment	- Operation Temperature: -40°C~80°C - Storage Temperature: -40°C~80°C - Relative Humidity: 5%~95%, non-condensing
Certification	CE,FCC Class A
MTBF	126,104 hours at 40°C

