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PCA-6782



Embedded Atom N455 1.66GHz / D525 1.8GHz

Fanless, 0 ~ 60°C (32 ~ 140°F) operation

10/100/1000Base-T Fast Ethernet Connections

Dual Display: VGA + LVDS

ISA bus interface

PCA-6782 is an Intel® Atom™ dual-core D525 / fanless N455 CPU based ISA-interface half-size single board computer. With high performance Atom D525 dual-core computing power, it is ideal for intense data or graphic processing applications; with fanless Atom™ N455 CPU, it has ultra high reliability to resist heat, dust, vibration and shock in any application environment. PCA-6782 is designed with an Intel® Atom™ D525/N455 CPU and ICH8M I/O control hub. The Atom™ D525 dual core CPU brings new generation computing capability into the half-size SBC application field. Compact size, low power consumption (Total power consumption ? 17.62 W) and dual-core parallel computing power and maximum 2 GB of DDR2 667 MHz memory capacity makes the PCA-6782D a powerful small form-factor computer platform for modern industrial applications that require high computing power. The fanless Atom™ N455 CPU (Total power consumption ? 12.56 W) is ideal for data-acquisition, environment monitoring system and factory automation that requires no air flow environments. PCA-6782 has an integrated graphic core of Intel Embedded Gen3.5+ graphic technology with 224 MB shared memory. This feature makes PCA-6782 is capable of handling complex and intense 2D/3D graphic processing without an add-on graphic card; its VGA and LVDS dual video outputs also makes it suitable for applications requiring dual display or digital panel display capabilities. PCA-6782 is rich in I/O interfaces: it has three SATA ports (300 MB/sec) for mainstream SSD (solid state disk), HDD, and ODD connections, one legacy IDE port for the ODD connection. It also has a CF socket to support an economical, easy-to maintain SSD device. Additionally, the two serial ports can be used as reliable legacy device control interfaces. **Flash Disk and Memory not included.**

Specifications

SBC Type:

Single Board Computers > 1 GHz

Processor

Processor:

Intel Atom N455

Clock Speed:

1.66 GHz

Real Time Clock:

Processor Misc.:

Optional Processor: Intel Atom D525 1.8 GHz

Chipset: Intel ICH8M

Memory

BIOS/ Bootloader:

AMI 16 Mbit SPI Flash

Primary I/O

Disk Interface:

1x EIDE which supports 2x IDE Drives

3x SATA

Video Out:

Intel® ICH8M CRT/LVDS

Audio:

Intel High Definition audio interface requires an audio extension module PN: PCA-AUDIO-HDA1E

Ethernet:

10/100/1000 Base-T with a RJ45 connector and LAN1 Intel 82567V controller

USB:

8x USB 2.0

Serial Ports:

2x RS-232

1x Parallel EPP/ECP

Watchdog:

Primary I/O Misc.:

Optional Serial Ports: 4x RS-485 with auto-flow control

Display

Chipset: Embedded Gen3.5+ GFX Core technology, Direct X 9/Pixel Shader 2.0 compliant

Interface: 15 pin VGA D-sub connector x1/On-board LVDS pin header x 1 (supports single channel 18-bit LVDS)

Display mode:

- VGA: Supports up to SXGA 1400 x 1050 @ 60 Hz
- Dual Display: CRT + LVDS, support extended mode and clone mode

LVDS: Supports 18-bit single channel and up to WXGA 1366 x 768 or 1280 x 800

VRAM:Shared 224 MB

Secondary I/O

LPT Port:

Keypad:

PS/2:
Secondary I/O Misc.:
FDD interface: Supports one floppy disk drive

Analog on

A/D:
D/A:

Dimensions

Dimensions:
7.3 × 4.8 in
Weight:
300 g
Form Factor:
Half Size ISA Card

Power Requirements

Power Misc.:
Power supply Voltage: +5V , +12V, +3.3V, +5VSB, -5V, -12V

Environmental

Low Operating Temperature:
0 C
High Operating Temperature:
60 C

Pricing

PCA-6782N
ATOM N455 1.66GHZ HALF ISA W/ GLAN/8x USB
$308.00
Parent Product:

PCA-6782D
ATOM D525 1.8 GHZ HALF ISA W/ GLAN/8x USB
$333.00
Parent Product:

Exension Modules:
PCA-COM485
Four port RS-422/485 module with auto-flow control function
$0.00
PCA-AUDIO-HDA1E
Extension module for 7.1 channel High Definition audio
$0.00

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