

Main Features

- ♦ Low Power ETX CPU Module
- ♦ On-board Intel® Celeron® M 600 MHz with 512 KB L2 Cache
- ♦ Intel® 852GM Chipset
- ♦ Supports 200/266 SO-DIMM up to 1 GB
- ♦ Intel® 82562GE 10/100 Ethernet Controller
- ♦ Realtek ALC655 CODEC, AC' 97 Audio Interface
- ♦ Supports LVDS Interface
- ♦ Supports DVO Interface

Product Overview

The ICES 102 is an ETX CPU module with Intel® 852GM chipset supports Intel® Celeron® M or Pentium® M processor with 400 MHz FSB and one un-buffered non-ECC SO-DIMM 200/266 up to 1 GB. The Intel® 852GM chipset supports ISA, PCI, IDE, LPT, VGA, LVDS, LAN, Serial, USB DVO interfaces and more.

The ICES 102 follows the ETX standard x 1, x 2, x 3, x 4 connections between the ETX CPU module and I/O carried board, thus it is compatible with the carried boards from other brands like Kontron and Advantech. The ICES 102-C65 ETX CPU Module can easily integrated into most of the limited space projects, such as industrial automation, data acquisition and equipment computers.

Specifications

CPU Support

- ♦ Intel® Celeron® M processor
- ♦ Intel® Pentium® M processor
- ♦ Supports 400 MHz FSB CPU only

Main Memory

- ♦ Supports one unbuffered non-ECC DDR SO-DIMM 200/266 up to 1 GB

Chipset

- ♦ Intel® 852GM + ICH-4 chipset

BIOS

- ♦ Award System BIOS
- ♦ Advanced Power Management support
- ♦ 4 Mbit flash ROM
- ♦ Supports Boot from USB-CDROM and Boot From CF Card (Industry grade bootable CF Card)

On-board LAN

- ♦ Intel 8256GZ 10/100 Fast Ethernet
- ♦ Supports PXE LAN boot function
- ♦ Signals down to I/O Board

Display

- ♦ Intel® 852GM integrated graphics solution up to 64 MB of dynamic video memory allocation drives a standard progressive scan analog monitor with pixel resolution up to 1600 x 1200 at 85 Hz
- ♦ Wide screen resolution support for 852 x 480 and 1366 x 768 resolution
- ♦ Single or dual pixel LVDS panel support
- ♦ Supports CRTs up to 1920 x 1440 x 32 bpp at 85 Hz

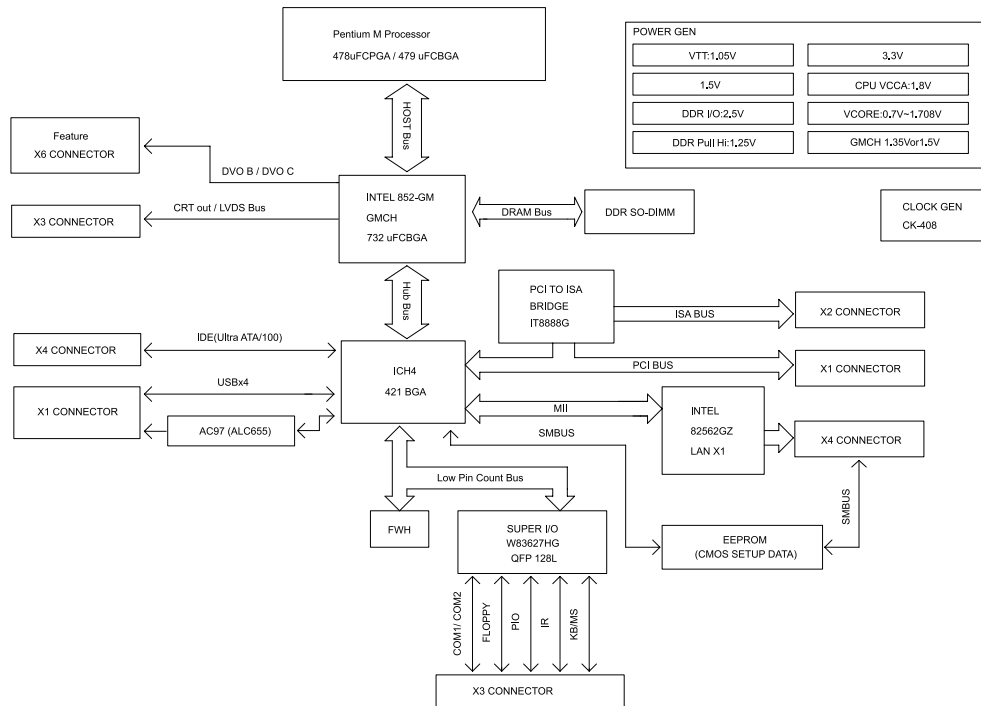
Super I/O

- ♦ WINBOND W83627HF

ETX Connector

- ♦ X1
4 x 32-bit/33 Mhz PCI
Realtek ALC 655 Codec - AC' 97 Audio Interface
4 x USB 2.0
- ♦ X2
ISA Interface (full function)
- ♦ X3
1 x VGA
1 x LVDS (dual pixel)
1 x Parallel port
1 x KB/Mouse
COM1 and COM2
1 x IrDA

Block Diagram



- X4
1 x Ethernet (10/100)
SMBus/I2C
2 x IDE

On-board RTC

- On-chip RTC with battery back up
- 1 x External Li-ion battery
- Tolerance less than 2 secs (24 hours) under 25 °C environment

Power Requirements

- +5 V power only, follows ETX power and ground pin definitions.
- Supports both AT and ATX power supplies

Dimensions

- 95 mm (W) x 114 mm (L) (3.74" x 4.5)

Environment

- Operating temperature: -20°C to 65°C
- Storage temperature: -25°C to 85°C
- Relative humidity: Non-operating 5% to 95%, non-condensing

Certifications

- CE approval
- FCC Class A

Ordering Information

- **ICES 102-373 (P/N:10K00010202X0)** RoHS Compliant
ETX Module with Celeron® M 1 GHZ /512 KB L2, VGA/ISA/PCI/IDE/LVDS/
Audio/COM/LPT/USB2.0/LAN Interface
- **ICES 102-C65 (P/N:10K00010201X0)** RoHS Compliant
ETX Module with onboard Celeron® M 600 MHz processor, VGA/ISA/PCI/IDE/
LVDS/Audio/COM/LPT/USB2.0/LAN Interface
- **ICES 102-SKT (P/N:10K00010200X0)** RoHS Compliant
ETX Module with Pentium® M /Celeron® M CPU Socket, VGA/ISA/PCI/IDE/
LVDS/Audio/COM/LPT/USB2.0/LAN Interface