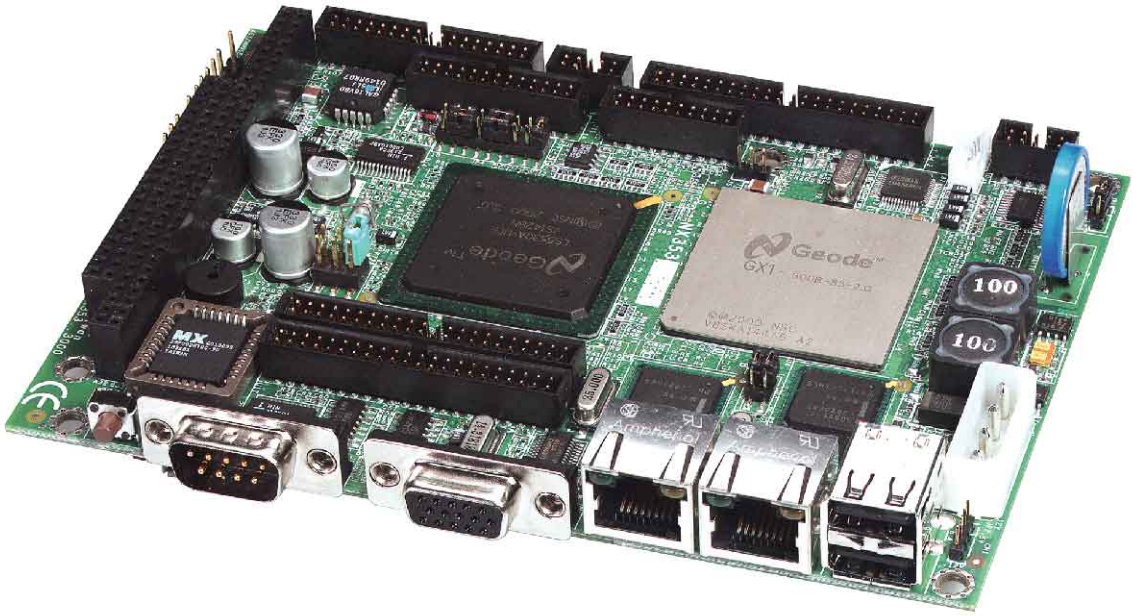
Mungo350

High performance, 3.5" Single Board Computer

Kontron's Mungo 350 is a 3.5" All-In-One little Board, which embedded NS GEODE GX1 Processor and NS CX-5530A chipset. The advantage of Mungo 350 is that it has low power consumption all at clock frequencies and both chips can integrate interface functions performed by external hardware. Besides, it also owned a variety of functions, for example: VGA; Audio; extension devices; Dual LAN and so forth.



High performance for Embedded little board

The Mungo 350 features a NS GX-1 processor based All-in-one embedded little board with 16 KB L1 cache. It supports up to 128 MB memory with one 144-pin SO-DIMM socket. 2 channels high performance Ultra ATA/33 MHz.

In VGA function, the NS CX5530A chipset provides display Share memory up to 16 MB. Also supports CRT/LVDS/TFT controller with high quality.

AC97 CODEC provids audio output and has Line-in/Line-out/Mic function to extend as well. Onboard support two Universal Serial Bus (USB) ports, two serial ports (one is Ext connector, the other is Box-header), one parallel port, and a floppy interface are stand-ard. This Embedded little board can provide access to peripheral interface such as PC-104 and CompactFlash type I/II controllers.

The Mungo 350 also offers low power consumption of the NS GX-1 processor which this solution satisfied the needs of battery powered devices. Other fea-ture contains: Two COM Ports, 16-level programmable Watchdog, IrDA inter-face, Internal RTC, Mini-DIM PS/2 K/B and Mouse connector.

Feature include:

- **Standard 3.5 Embedded little board**
- **NS GEODE GX-1 processor with 16 KB L1 Cache**
- **Up to 128 MB unbuffered SDRAM in one 144-pin SO-DIMM**
- **PCI Ultra DMA/33 IDE Support Geode GX-1 processor graphics/video output is connected to the CX-5530A, which supports the function of CRT/ LVDS/TFT Display and AC97 2.0 Audio CODEC compliance interface using Line-in/Line-out/Mic to extend**

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Mungo350- Technical Specifications

CPU
- NS GX-1 processor, up to 333 MHz in 352 PBGA Package becomes available

Chipset
- NS CX5530A

Bus Interface:
- Front Side Bus (33 MHz);
- PCI Bus (33 MHz)

Memory
- One 144-pin latching 64-bit SO-DIMM socket
- Up to 128 MB with 66/100 MHz Synchronous DRAM/Registered SDRAM non-ECC mode; It supported video memory bus
- IDE Device (for Compact flash I/II)

Flash Memory
- 2 MB for BIOS field upgrade 4 KB Serial EEPROM for user configuration I/O

I/O Port
- I/O: Onboard 83977F
- USB Ports: Two (Ver1.1)
- Serial Ports: Two 16550 UART compatible ports with COM1 as RS232; COM2 as RS232/RS422/RS485
- Parallel Port: One high-speed parallel port, SPP/EPP/ECP mode
- Floppy Disk: Support for one drive
- EIDE: 4 EIDE drivers, support PIO Mode 4
- or Ultra DMA/33
- Ethernet support: PCI 10 Base-T/100 Base-TX (82559) Controller WFM 2.0 Compliant, 10/100 Mbit/sec Ethernet X2
- One PC-104 Connector support ISA bus
- Audio: AC97 CODEC support Line-in/Line-out/Mic function

VGA Display
- Accelerated Graphics Port supports 64-bit CRT/Flat Panel/-LVDS controller runs in internal graphics mode with NS CX5530A chipset that can share memory display up to 16 MB through BIOS. By the way, CX5530A has ability to display CRT/Flat panel simultaneously and the resolution up to 1024x768x8 pixels.

Clock/Calendar
- Real-time clock with 256 byte battery backup CMOS RAM

BIOS
- Award BIOS in Boot Block Flash with emergency recovery code; save CMOS in Flash option
- Auto configuration, extended setup
- PnP tables Setup console redirection
- to serial port (VT100 mode) with CMOS setup access Diskless, keyboardless and videoless operation extensions; system and BIOS shadowing
- Programmable bus and I/O speeds, and memory wait states CC00-E000 address blocking
- Advanced Power Management (APM 1.1) support with programmable resume by alarm and wake-up events

Supervisory
- 16-level programmable Watchdog timer
- Power failure/low battery detector

OS Compatibility
- PC and MS-DOS™; Windows® 95; Windows® 98 series; Windows® 2000; Windows® Me; Windows® NT 4.0 and Linux

Power Requirements
- Supply Voltage Vcc = + 5 V ± 12 V
- Vcore: 2.0 V

Environmental:
- **Temperature:** 0 ° to 60 °C
- **Humidity (RNC):** 5 % to 80 %
- **Storage Temperature:** –25~+65 deg. C

Mechanical:
- 145.7x 102 (3.5“)

Reliability
- Mouse / keyboard voltage protected by self-resetting fuses
- 24 months limited warranty
- 6 hours 45 °C dynamic burn-in

EMI:
- CE Certified
- FCC Certified
- EMI Class B

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