

NATI250



Features

- Intel[®] GS45 Express chipset supporting Intel[®] Core[™] 2 Duo Processors on 45-nm process
- Extended temperature support
 - Extreme low temperature start
 - High Ambient support
- Core[™] 2 Duo processor options from the Intel Embedded group:
 - 2.26 GHz Intel Core™ 2 Duo SP9300 25W
 - 1.86 GHz Intel Core™ 2 Duo SL9400 17W
 - 1.2 GHz Intel Core™ 2 Duo SU9300 10W
 - 1.2GHz Intel Celeron® M ULV723 10W
 - 1.2 GHz Intel Celeron® M ULV722 5.5W
- Heat spreader and fansink various options
- Type 3 with Type 2 compatibility (no IDE)



Overview

The Microbus MAT1250 is a Type 3 COM Express[™] (Computer On Module) card featuring the high-speed circuitry of a computer. Each COM Express[™] card integrates a CPU, chipset and memory, plus many common inputs and outputs of a PC making system development more efficient.

The card provides the ideal platform for demanding embedded PC applications where long term operation and supply are critical. It offers low power consumption processors and supports the design of rugged and compact solutions for harsh and high availability requirements.

The small form factor card offers a selection of processors between high performance to low power consumption. The 2.26GHz SP9300 is a 25W TDP (Thermal Design Power) CPU and is ideal for high performance applications.

For more demanding compact designs the Dual-Core 1.2 GHz SU9300 10W TDP CPU and the Single-Core 1.2 GHz ULV722 5.5W TDP offer high performance yet low power consumption. The heat-spreader plate supports integration of the card into system enclosures.

Extended Temperature Operation

The MAT1250 has been tested to extended temperatures including extreme cold start.

COM Express Carrier board design

Microbus are able to undertake custom design of carrier boards and offer a design checking service for OEM's own designs.



PROCESSOR OPTIONS

2.26 GHz Intel Core" 2 Duo SP9300, 6Mbytes of Cache, 1067 MHz FSB, 25W
1.86 GHz Intel Core" 2 Duo SL9400, 6Mbytes of Cache, 1067 MHz FSB, 17W
1.2 GHz Intel Core™ 2 Duo SU9300, 3Mbytes of Cache, 1067 MHz FSB, 10W
1.2 GHz Intel Celeron M ULV723, 1Mbyte of Cache, 800MHz FSB, 10W
1.2 GHz Intel Celeron M ULV722, 1Mbyte of Cache, 800MHz FSB, 5.5W

SPECIFICATION

Chipset	Intel GS45 Express chipset with ICH9M south bridge Integrated TPM
BIOS	AMI with automatic legacy and legacy-free suport
Memory	DDR3 memory up to 8Gbytes
Video	SDVO (e.g. for 1 or 2 DVIs Dual channel LVDS VGA TV
Ethernet	1 10/100/1G Ethernet
Disk interfaces	4 SATA ports
USB	8 Ports
Environment	0°C to 70°C Operational -40°C to 100°C Storage RH 0 to 95% non condensing Extended temperature range available, please contact Microbus for further information.
Module size and type	Type 3 and Type 2 compatible COM Express Basic Module size, 125x95mm The MAT1250 can be shipped configured as a Type 2 or type 3 COM Express module. As a Type 2 card the PATA interface is not supported.



SERVICE

Customer Service	Friendly, helpful service for product ordering and repair returns
Technical Support	Comprehensive pre- and post-sale technical support for full life of the product
Warranty	12 month warranty, extended warranties and factory repair/replacement programmes
Long Term Supply	Complete support for full life of the product
Quality Management	Microbus operates a quality management system complying with ISO 9001:2000
Training	Comprehensive product training programmes for customers

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