GEMINI

AIC

- Intel® ICH10R
- 24-pin Power Connector
- 6 x SATA Connector
- 8-pin Power Connector
- 6 x DDR3 DIMM Sockets (for CPU0)
- FCLGA1366 Processor Socket (CPU0)
- 8-pin Power Connector
- Intel® 82571 LAN
- Intel® 82574 LAN
- Intel® 82566 LAN
- Intel® 82571 LAN
- 8-pin Power Connector
- FCLGA1366 Processor Socket (CPU1)
- 2 x GbE (82571)
- 2 x GbE (82574 + v82566)
- 2 x GbE (82571)
- 2 x USB
- VGA Port
- Keyboard/Mouse Pin-Header
- Serial Port
- 6 x DDR3 DIMM Sockets (for CPU1)
- Aspeed AST2050 Video + BMC (IPMI 2.0)
- BIOS Debug Display
- Gen2 PCI Express x8 Slot
- AMI BIOS (SPI)
- Intel® 5520 IOH
- Gen2 PCI Express x16 Gold-Finger
- SW1 Dipswitch for PCI Express Strapping Configuration
- 6 AIRMAX® Connectors Provide 11 x Gen2 PCI Express X4 + 1 x Gen1 PCI Express X4
- Intel® 5520 IOH
- 8-pin Power Connector for Output
- SW2 Dipswitch for PCI Express Strapping Configuration

Dimensions

mm : 431.8 x 241.3
inches : 17 x 9.5

(intel) MAX I/O™ Maximum I/O PCI EXPRESS GEN 2 SERIAL ATA ✓RoHS Compliant DDR3

Gemini series motherboard offers compelling performance and improved power efficiency, optimized for efficient performance platforms (storage, security and communications infrastructure).

By implementing 45nm/32nm Intel® Xeon® 5500/5600 platform architecture with AIC-patented MAX I/O™ technology, Gemini series motherboard delivers unmatched performance and capability to maximize all available I/O bandwidth, pushing the boundaries of Gen 2 PCI Express.

Featured with groundbreaking technologies like Intel® QuickPath architecture, SMT and Turbo mode, Intel® QuickPath Interconnect and DDR3 memory technology, Gemini series motherboard enables next generation server solutions with significant performance.

For more information about Max I/O™, please visit www.aicipc.com/maxio

Features :

- Supports 2 Intel® Xeon® Processor 5500/5600 Series for significantly increased server performance and improved power efficiency

- Embedded components for 5+ year long life

- Max I/O™ technology to support optimal number of PCI devices utilizing 68 lanes of PCIe Gen2 and 4 lanes of PCIe Gen1

- Onboard Baseboard Management Controller for system management and IPMI control

- 6 server class GbE ports

- Rackmount Technology Extension (RTX) form factor utilizes full internal chassis volume for optimum I/O configurations

PLATFORM SOLUTIONS GROUP

SPECIFICATIONS

System	Processor Support	Two Intel® Xeon® Processor 5500/5600 Series
	System Bus	800/1066/1333 MHz
	Socket Type	FCLGA1366 (Socket B)
	System Chipset	• Dual Intel® 5520 Chipset • Intel® 82801JR I/O Controller (ICH10R)
	System Memory	• 12 x DIMM slots support up to 192 GB of DDR3 800/1066/1333 MHz Registered ECC memory (recommended) / Unbuffered ECC SDRAM • Tri-channel, 2 DIMMs per channel
	Expansion	A) 1 x PCIe Gen2 X8 slot • 1 x PCIe X8 (2U) B) 1 x PCIe Gen2 X16 Gold-Finger + 6 x AIRMAX® Connectors provide 64 total lanes of PCIe available (60 lanes PCIe Gen2 + 4 lanes PCIe Gen1) (can be converted into various combination of slots to support full-length, full-height expansion cards) Riser card options: • 1 x PCIe X16 (X8 lane) (ext.) + 4 x PCIe X8 (ext.) + 2 x PCIe X8 (int.) + 1 x PCIe X8 (X4 lane) (int.) (2U) • 2 x PCIe X16 (ext.) + 3 x PCIe X8 (ext.) + 2 x PCIe X8 (X4 lanes) (Horizontal Riser, 3U) • 2 x PCIe X16 + 3 x PCIe X8 + 2 x PCIe X8 (X4 lanes) or 2 x PCIe X16 (X8 lanes) + 5 x PCIe X8+ 2 x PCIe X8 (X4 lanes) (Vertical Riser, 3U)
System BIOS	BIOS Type	• AMI BIOS • SPI (Serial Peripheral Interface) FLASH Interface
	BIOS Features	• ACPI 1.0/2.0/3.0 • PXE 2.0 • WOL • AC loss recovery • IPMI KCS interface • SMBIOS 2.0 • Serial console redirection

On-board Devices	SATA	Built-in Intel® ICH10R SATA2 controller with RAID support
	BMC	Aspeed AST2050 Mainstream PCI Graphics & Remote Management Processor • Baseboard Management Controller (BMC) - IPMI 2.0 spec - iKVM, Media redirection, SMASH support - KCS (Keyboard Controller Style), IOL (IPMI Over LAN), SOL (Serial Over LAN) interface - Temp, voltage and fan speed monitoring - Smart fan speed control - System identity, fan fail alarm, system status alarm LED - Remote power ON/OFF/RESET - RMCP+, SNMP, DHCP in IOL support - AES-128 encryption in RMCP+
	Network Controller	• 2 Intel® 82571EB Gigabit Ethernet Controller, dual port, PCIe v1.0a • Intel® 82574L Gigabit Ethernet Controller, single port, PCIe v1.1 (shared with BMC) • Intel® 82567LM Gigabit Ethernet PHY, single port, 1 Gbps
	Graphics	Aspeed AST2050 Mainstream PCI Graphics & Remote Management Processor • 2D Video Graphic Adapter w/ PCI bus interface • 8 MB of system memory • 1600 x 1200 @ 60 Hz
	Super I/O	Winbond W83627DHG
Input/Output	Serial ATA	6 x SATA2 ports
	LAN	6 x external RJ-45 ports
	USB	• 2 x external USB ports • 4 x internal USB pin-headers
	VGA	• 1 x external VGA port • 1 x internal VGA pin-header
	Serial Port	• 1 x external DB-9 serial port • 1 x internal DB-9 serial pin-header
	Others	1 x keyboard + 1 x mouse via pin-header on-board debug display, GPIO port