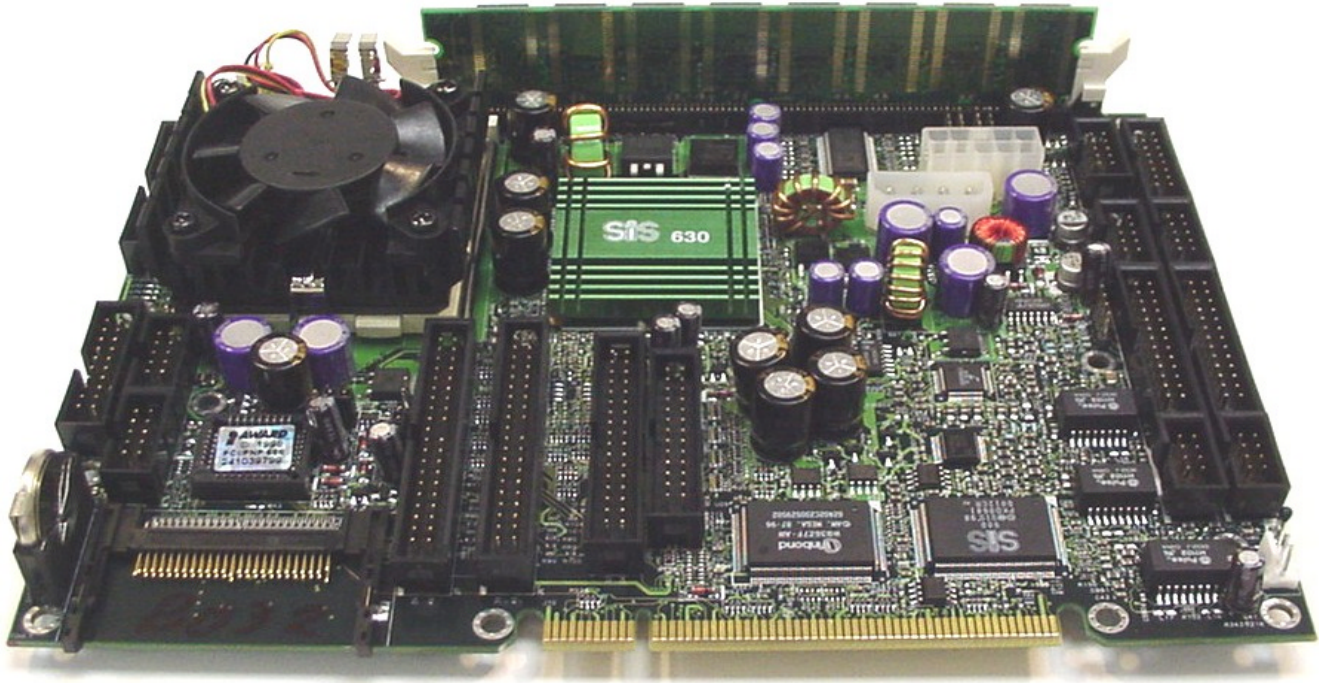




COM-100 - Sparrow

Single Board Computer



The **COM-100** (also called the “**Sparrow**”) Single Board Computer SBC is a highly integrated, ultra-compact and extremely capable “complete computer on a board”. Based on the INTEL Pentium III or Celeron processors running at up to 1GHz, this Single-Board Computer (SBC) sports three independent 10/100 Mbps Ethernet Channels, five USB 1.0 Ports, four Serial Ports, one Parallel Port, embedded High Resolution Video controller, and complete Stereo sound Audio controller. The DIMM socket allows up to 512MB of memory, and a complete set of headers allows attachment of up to 4 external IDE storage devices, including the on-board Compact Flash connector, plus up to two floppy diskette drives. The edge mounted PICMG-PCI connector allows off-board expansion with up to four bus-master PCI devices via an external passive PCI back plane in as little as a 1U high 19” chassis.

Initially developed for high-security routing and firewall applications, the Sparrow’s expanded communications capabilities makes it ideal for network intensive applications. In addition, the on-board serial ports and USB ports makes this SBC a true “communicator”, for embedded in-network data collection and transmission applications. Built for continued use, the Sparrow is equally at home in desktop, industrial, embedded and military applications requiring the utmost in ruggedness and reliability.

The **COM-100 - Sparrow** runs off 12V DC input from an external “Universal” power supply “brick”, allowing use in fixed as well as airborne or mobile installations.

Industrial Design, Inc. , 2100 Willowbrook Way, Plano, Texas 75075

Phone: (469) 576-2969. Fax: (972) 596-8016.

Www: <http://www.ipd-us.com>. E-mail: sales@ipd-us.com



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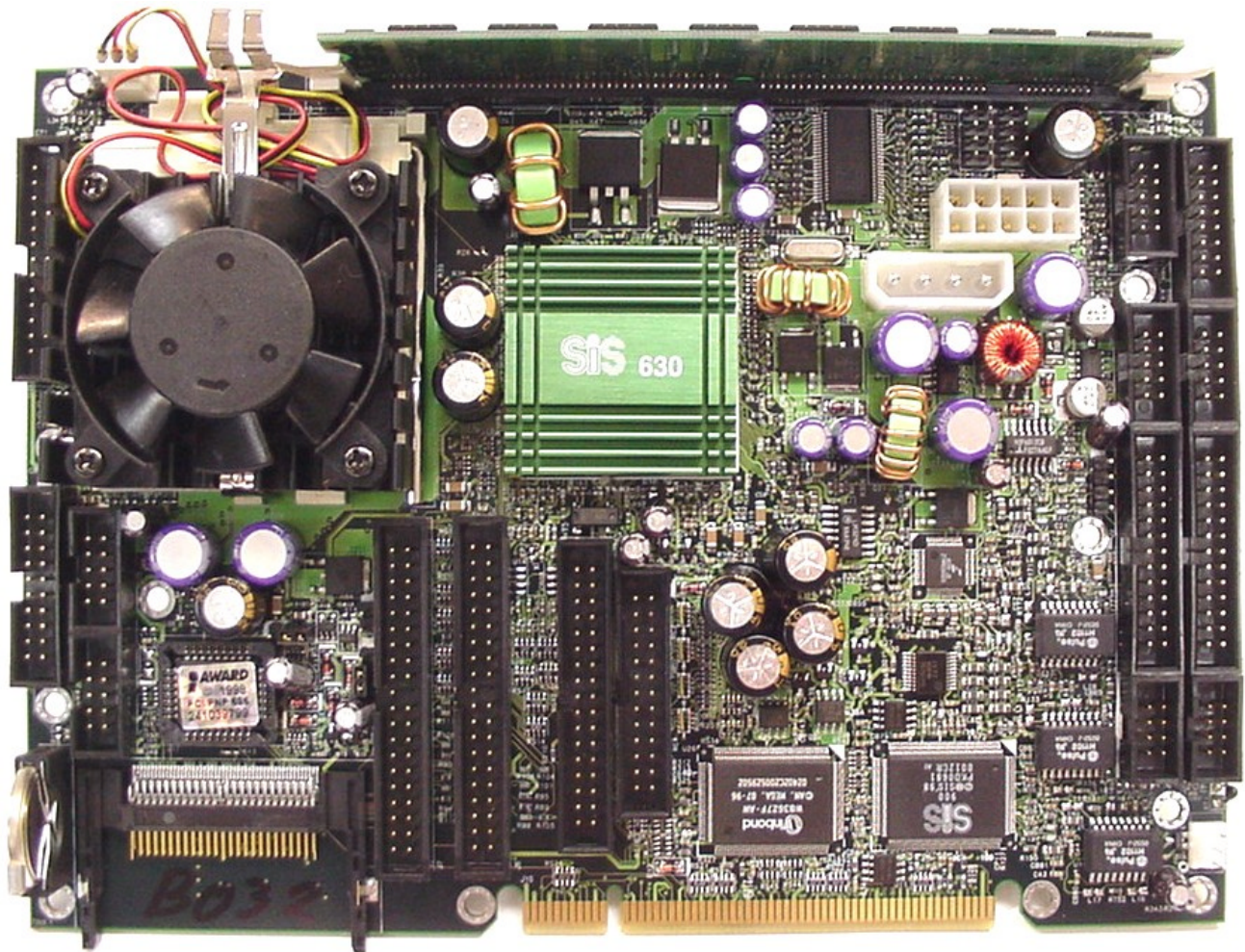
Specification:

- CPU Celeron or Pentium III, 300MHz – 1GHz
PGA-370 socket, 66/100/133MHz FSB
- Chip Set SiS-630E with SiS-950 LPC Super I/O
- Memory One 168-pin DIMM Socket, 3.3V, PC-100/PC-133, 64-bit
Up to 512MB
- Video Integrated SiS-300 128-bit Ultra 4X AGP 2D/3D Video Controller
2/4/8/16/32/64MB Share Frame Buffer (SFB)
- Keyboard, Mouse Header for KBD and MOUSE PS/2 signals
- Serial Four 16555 style COM1, COM2, COM3 and COM4 Headers
- Parallel One IEEE 1284 EPP/ECP Parallel Port Header
- Audio Line In, Line Out, MIC Header
CD-In Header
Legacy SB16 compatible
16-bit full duplex CODEC
4 CH 16-bit DAC
32-bit PCI Bus Master
- Hard Disk Two Ultra DMA 33/66 Headers (IDE 1 and IDE 2)
(Note: IDE 2 Slave Channel used by Compact Flash)
- Floppy Disk One FD Header
- LAN Three Integrated SiS-900 based 10/100 100Base-T Ethernet Headers
IEEE 802.3x full-duplex flow control
- USB Five USB Ports, 2 in Back, 3 in Front
- Expansion One edge PCI (PICMG specification) expansion connector
- Indicators LED Indicators (Power, 2 * HD Activity, 3 * Ethernet, 2 * AUX) Header
- Digital Inputs RESET In, General Input 1 and 2
- Supervision CPU Voltages, System FAN
- BIOS Award BIOS, 2MB Flash ROM
- Power Power Input Connector for external supply of +12V DC
- Compliance Microsoft PC99 ready, P-n-P, DMI 2.1, ACPI 1.0, PCI 2.2
- Environment 10 – 40 degrees Centigrade
- Size 203.2 * 146 mm (8.0" * 5.75")
Will fit in a 1U high cabinet, no sockets or connectors on the bottom



COM-100 – Sparrow Single Board Computer

(Top view)

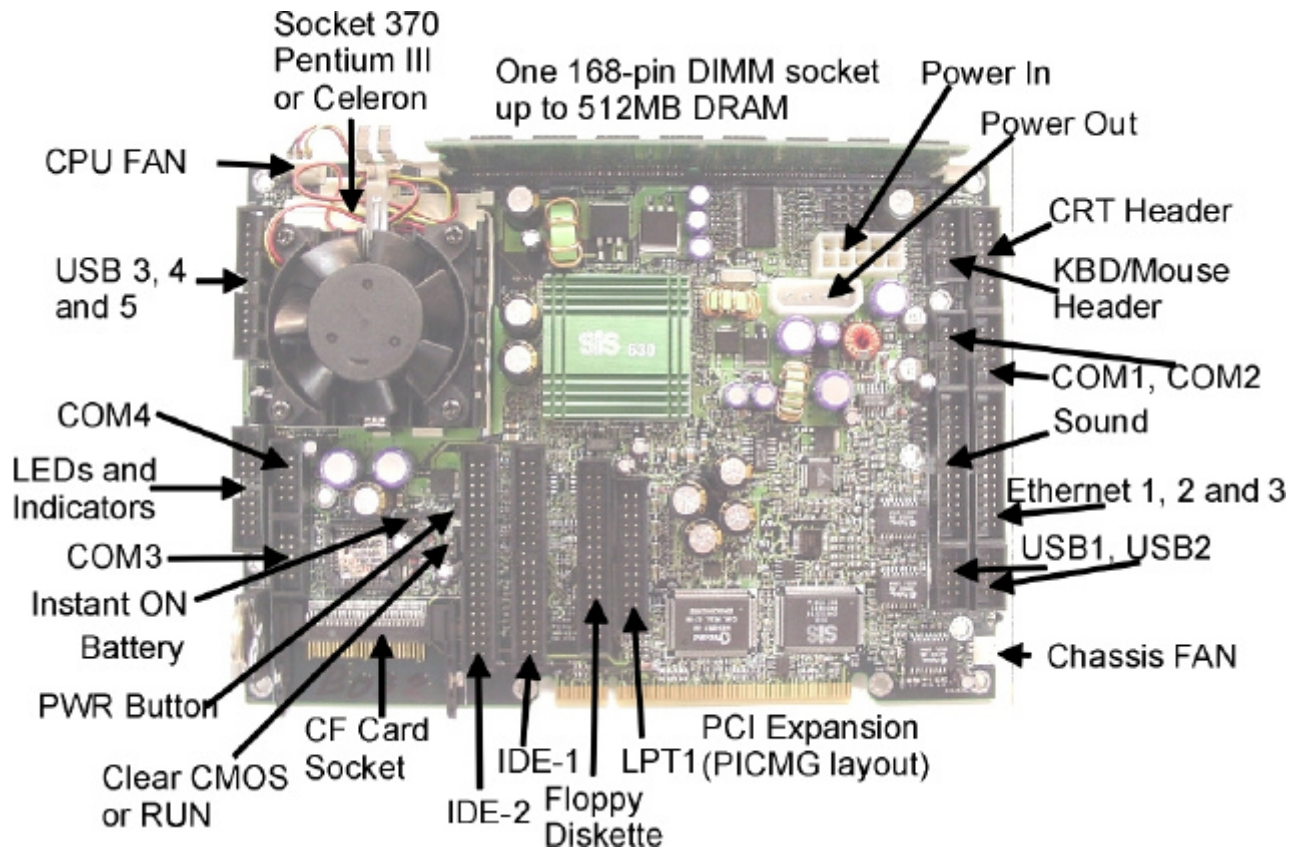




COM-100 – Sparrow

Single Board Computer

(Connector Layout)



Instant-On jumper:	Layout: 1-2-3.	1-2, Operation controlled by PWR Button. 2-3: Board starts instantly by Power ON
CMOS Jumper:	Layout: 1 2 3	1-2: Clear CMOS 2-3: Run (normal position)
PWR Button:	Layout: 1 2	1-2: Connect: Power ON or OFF (toggle)



COM-100 – Sparrow

Single Board Computer

Ordering Options and Optional Add-Ons

The **COM-100 - Sparrow** SBC normally comes “bare”, the board only, without CPU, Memory, FAN, cables, add-on cards, etc. – ready for embedding by the customer into the relevant enclosure and application.

Based on earlier customer requirements, Industrial Design has made available the following optional add-ons:

- COM-101: Front (LED) Indicator Panel
- COM-102: KVM Board 1 - Back Connector Panel
- COM-103: 50 watts “universal Input” (90 – 240Vm 50-60Hz) 12V DC Power Supply, with U.S. Power cable
- COM-112: KVM Board 2 – Front Connector Panel, 1U, version 2
- COM-113: COM+3LAN – Back Ethernet x 3 + 1 COM Port connector panel, 1U

and:

- PCI-101: PCI Expansion Passive Back Plane, 1 PCI Card
- PCI-103: PCI Expansion Passive Back Plane, 3 PCI Cards

In addition, we can deliver the **COM-100 - Sparrow** SBC itself completely configured with:

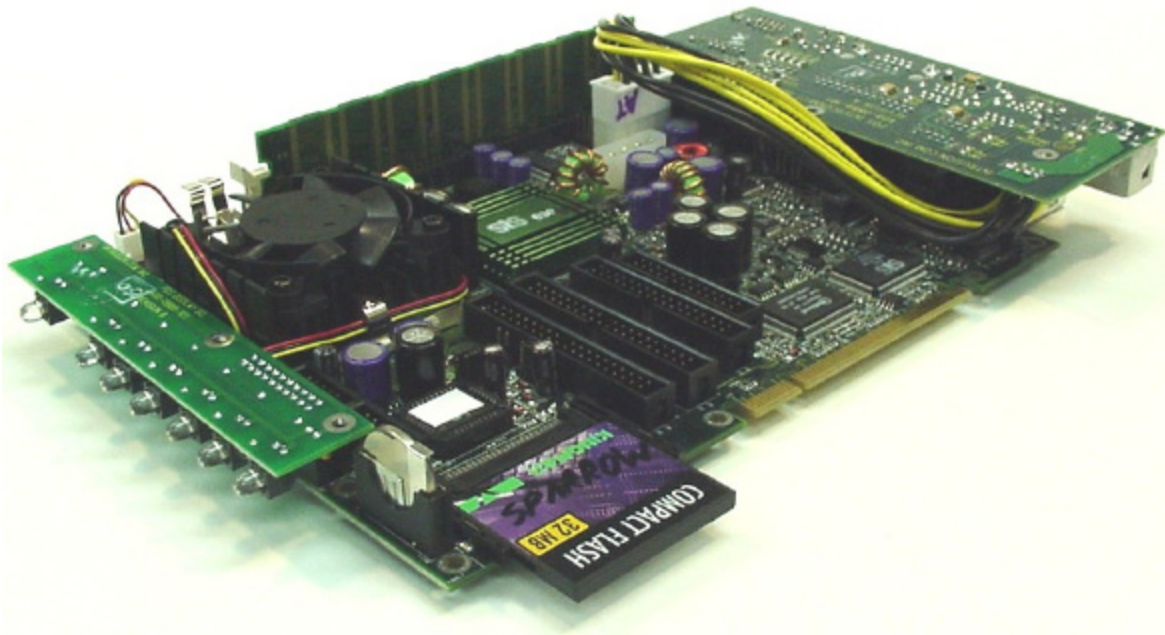
- COM-104: INTEL Celeron CPU, 600MHz
- COM-105: INTEL Pentium III CPU, 1MHz
- COM-106: DRAM Memory Stick – 64MB
- COM-107: DRAM Memory Stick – 128MB
- COM-108: DRAM Memory Stick – 256MB
- COM-109: DRAM Memory Stick – 512MB
- COM-110: Cooling Fan Assembly for CPU
- COM-111: Complete Cable Set consisting of:
 - 2 Ribbon Cables for up to 4 Hard Drives, CD-ROM, etc.
 - 1 Ribbon Cable for 2 Floppy Diskette Drives
 - 3 Hard Drive “Y” Power Connector Cables
 - 1 Hard Drive to Floppy Drive Power Converter Cable
 - 2 10-pin Header to DB-9-Male Serial Port Cables
 - 3 Ethernet Cables – 2 x RJ-45



COM-100 – Sparrow

Single Board Computer

w. COM-101- Front (LED) Indicator Panel





COM-100 – Sparrow

Single Board Computer

w. COM-102 – KVM Board 1 - Back Connector Panel
(Back-End Connectors)

