Intelligent Computer Peripherals ®

ICP

Chapter M

Appendix

M. Appendix

M.1 Technical Data of the ICP Controller

Board Size	Standard PCI long card format or 2/3 Size
Weight	0,35 kg
Temperature Range in Operation (measured in the enclosure)	10^{o} to 35^{o} C or 50^{o} to 95^{o} F
Temperature Range not in Operation	-10^{o} to 60^{o} C or 14^{o} to 140^{o} F
Humidity in Operation	20% to 75% not condensing
Maximum Altitude in Operation	3000 meter or approximately 10.000 feet
Power Consumption (5V, 12V)	approximately 10 Watt

M.2 Error Messages Issued by the ICP Controller

The following error messages are displayed only after a cold boot of the system.

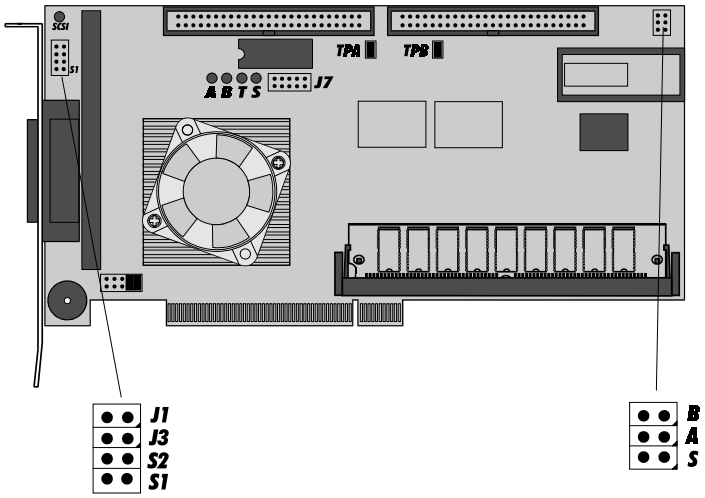
Error Message	**possible cause, remarks**
"Error detected on SIOP x"	SCSI cable defective hard disk connected defective SIOP x defective (x=1,2,3,4,5)
"Memory error detected“:	SIMM Module defective

Memory errors of the ICP Controller are also indicated acoustically with the audio alarm of the ICP Controller (3 beeps repeated every 10 seconds).

The following audio alarm sequence indicates that the ICP Controller is being operated without a SIMM: "beep-beep-short_pause-beep-beep-long_pause-beep-beep-short_pause-etc.".

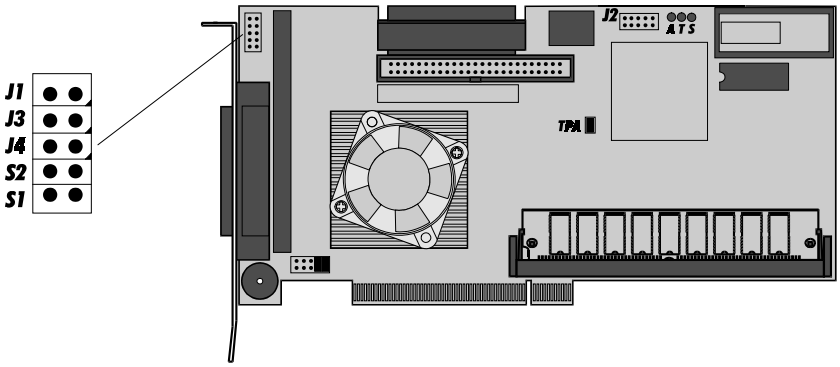
M.3 Connectors and Jumpers

GDT6111RP, GDT6511RP, GDT6121RP, GDT6521RP



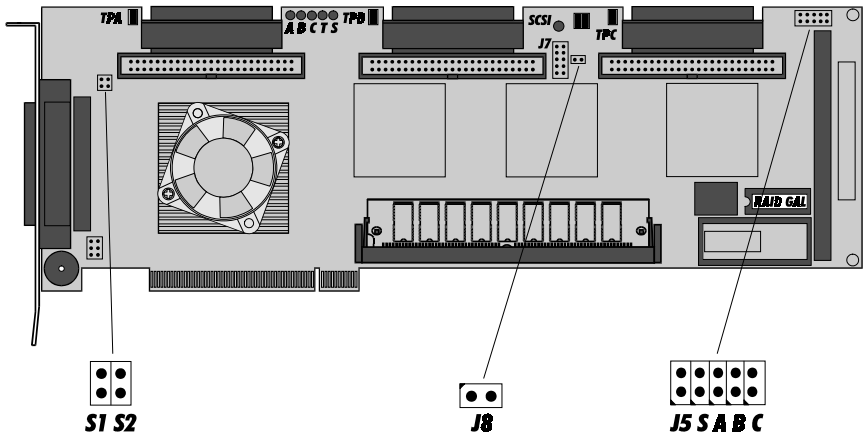
- The two jumpers located in the vicinity of the lower left corner of the CPU cooler must always be set. The other pins of this header must always remain open.
- Set S1 according to the installed SIMM type (Jumper S1 set = EDO SIMM; S1 open = FPM SIMM). For FPM SIMMs *never* set a Jumper on S1.
- S2 must always remain open.
- Connector J3 allows the connection of an external LED, which flashes synchronously with the electronic loudspeaker of the ICP Controller (the right pin connects with the cathode).
- Connector J1 provides for an external alarm or notification in case of fan failure and overheat of the Intel i960 ® CPU. Pin 1 of this connector (the right pin) can directly drive an appropriate logic (TTL output driver). A HIGH level indicates a CPU temperature of more than 70°C. The other pin (the left one) is connected with +5V through a 220 Ohm resistor.
- Connectors S, A, B allow the connection of external SCSI activity LEDs (the right pins connect with the cathode). An LED connected with connector S flashes whenever there is SCSI activity on the SCSI channels.
- When the TPA, TPB (Terminator Power for Channel A, B) jumpers are set, the ICP Controller supplies termination power on the SCSI cable. The TPA and TPB jumpers should always be set.
- The J7 connector includes the i960's ® I^2C bus signals.

GDT6117RP, GDT6517RP



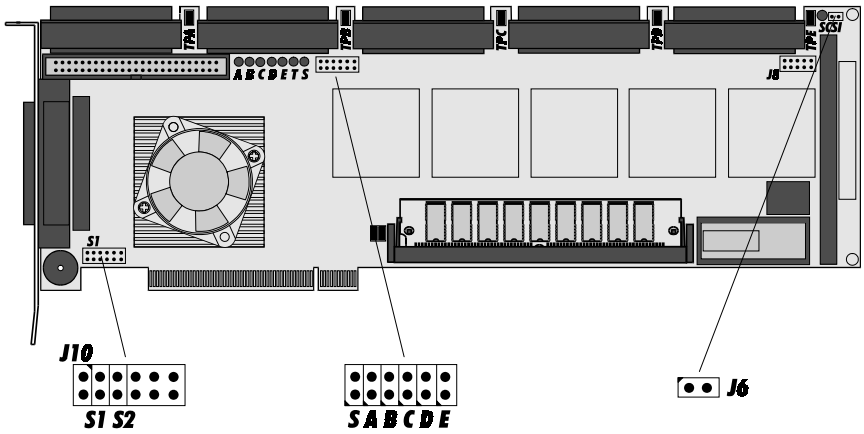
- The two jumpers located in the vicinity of the lower left corner of the CPU cooler must always be set. The other pins of this header must always remain open.
- Set S1 according to the installed SIMM type (Jumper S1 set = EDO SIMM; S1 open = FPM SIMM). For FPM SIMMs *never* set a Jumper on S1.
- S2 must always remain open.
- Connector J4 allows the connection of an external LED, which flashes synchronously with the electronic loudspeaker of the ICP Controller (the right pin connects with the cathode).
- Connector J3 provides for an external alarm or notification in case of fan failure and overheat of the Intel i960 ® CPU. Pin 1 of this connector (the right pin) can directly drive an appropriate logic (TTL output driver). A HIGH level indicates a CPU temperature of more than 70^{o}C. The other pin (the left one) is connected with +5V through a 220 Ohm resistor.
- Connector J1 allows the connection of an external SCSI activity LED (the right pin connects with the cathode).
- When the TPA (Terminator Power for Channel A) jumper is set, the ICP Controller supplies termination power on the SCSI cable. The TPA jumper should always be set.
- The J2 connector includes the i960's ® I^{2}C bus signals.

GDT6127RP, GDT6527RP, GDT6537RP



- The three pin rows of the header located in the vicinity of the lower left corner of the CPU cooler must always be open.
- The two jumpers between the LED "SCSI" and the TPC jumper must always be set.
- Set S1 according to the installed SIMM type (Jumper S1 set = EDO SIMM; S1 open = FPM SIMM). For FPM SIMMs *never* set a Jumper on S1.
- S2 must always remain open.
- Connectors S, A, B, C allow the connection of external SCSI activity LEDs (the lower pins connect with the cathode). An LED connected with connector S flashes whenever there is SCSI activity on the SCSI channels.
- Connector J5 allows the connection of an external LED, which flashes synchronously with the electronic loudspeaker of the ICP Controller (the lower pin connects with the cathode).
- Connector J8 provides for an external alarm or notification in case of fan failure and overheat of the Intel i960 ® CPU. Pin 1 of this connector (the left pin) can directly drive an appropriate logic (TTL output driver). A HIGH level indicates a CPU temperature of more than 70°C. The other pin (the right one) is connected with +5V through a 220 Ohm resistor.
- The J7 connector includes the i960's ® I^2C bus signals.
- When the TPA, TPB, TPC (Terminator Power for Channels A, B, C) jumpers are set, the ICP Controller supplies termination power on the SCSI cables. The TPA, TPB, TPC jumpers should always be set.

GDT6557RP



- The three remaining pin rows of the header which includes J10, S1 and S2 must always be open.
- The two jumpers located left of the SIMM must always be set.
- Set S1 according to the installed SIMM type (Jumper S1 set = EDO SIMM; S1 open = FPM SIMM). For FPM SIMMs *never* set a Jumper on S1.
- S2 must always remain open.
- Connectors S, A, B, C, D, E allow the connection of external SCSI activity LEDs (the lower pins connect with the cathode). An LED connected with connector S flashes whenever there is SCSI activity on the SCSI channels.
- Connector J10 allows the connection of an external LED, which flashes synchronously with the electronic loudspeaker of the ICP Controller (the upper pin connects with the cathode).
- Connector J6 provides for an external alarm or notification in case of fan failure and overheat of the Intel i960 ® CPU. Pin 1 of this connector (the left pin) can directly drive an appropriate logic (TTL output driver). A HIGH level indicates a CPU temperature of more than 70°C. The other pin (the right one) is connected with +5V through a 220 Ohm resistor.
- The J8 connector includes the i960's ® I^2C bus signals.
- When the TPA, TPB, TPC, TPD, TPE (Terminator Power for Channels A, B, C) jumpers are set, the ICP Controller supplies termination power on the SCSI cables. The TPA, TPB, TPC, TPD, TPE jumpers should always be set.

M.4 Index