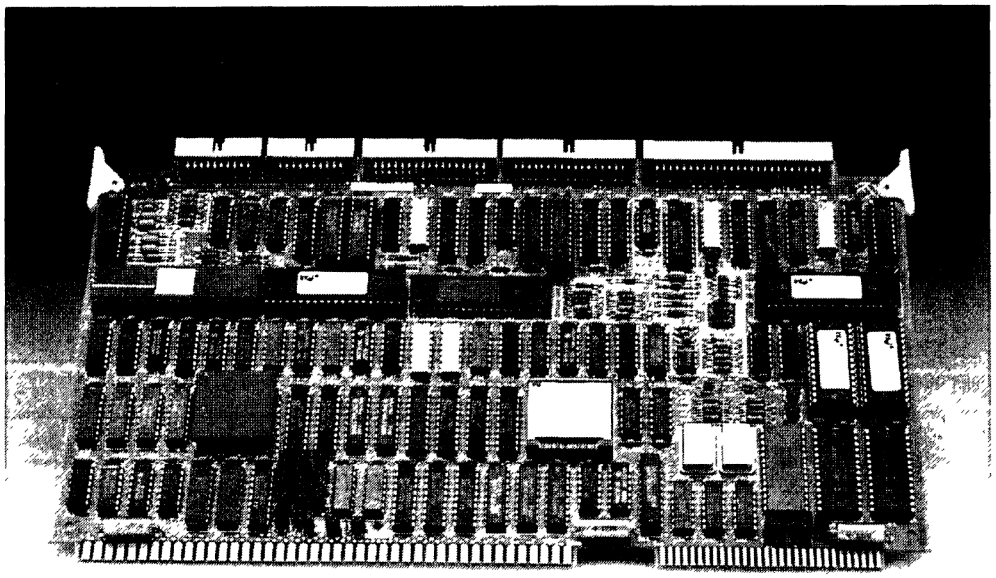
iSBC® 221* PERIPHERAL CONTROLLER



MULTIBUS®I CONTROLLER FOR HIGH PERFORMANCE, HIGH CAPACITY PERIPHERALS

The iSBC® 221 is a multifunction peripheral controller that provides access to high-performance, high-capacity disk drives (hard, flexible, and streaming tape). I/O bound applications and/or those requiring high disk capacity will especially benefit from this fast, reliable controller. The iSBC 221 can replace the Intel iSBC 214 without changing the operating system device driver or the disk drives.

FEATURES:

- Support for ESDI and ST506/412 hard disk drives, SA 45X/46X/475 flexible disk drives, and QIC-02 streaming tape drives
- Multiple track caching via 128K on-board data buffer
- Dual bus structure
- 10 MHz 80186 Microprocessor
- Mirror backup/restore between tape and hard drive
- On-board self-test diagnostics
- Error-checking and correcting code logic
- Support for 4,096 cylinders and 16 heads

intel

* The iSBC® 221 is also manufactured under product code piSBC® 221 by Intel Puerto Rico, Inc

September, 1989
Order Number 280410-002

FEATURES

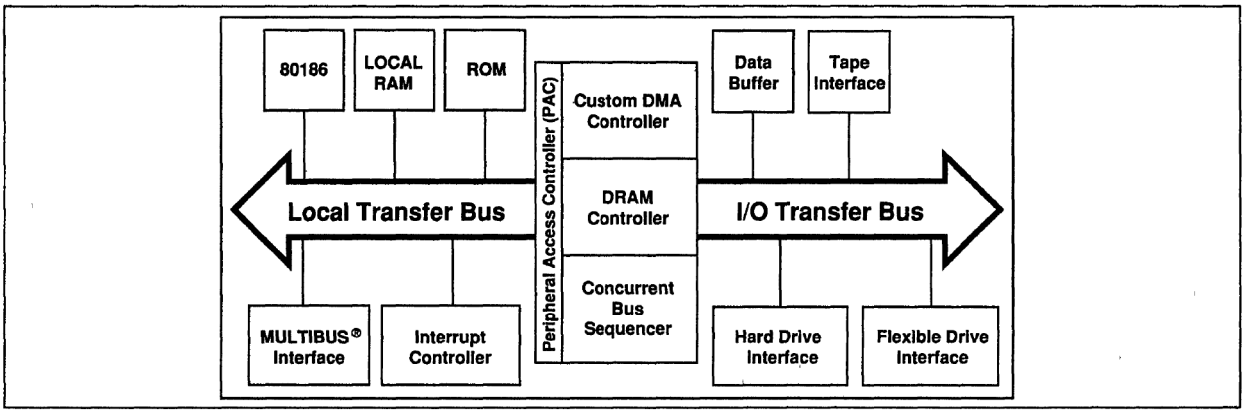


Figure 1: Simplified Block Diagram of iSBC 221 Peripheral Controller

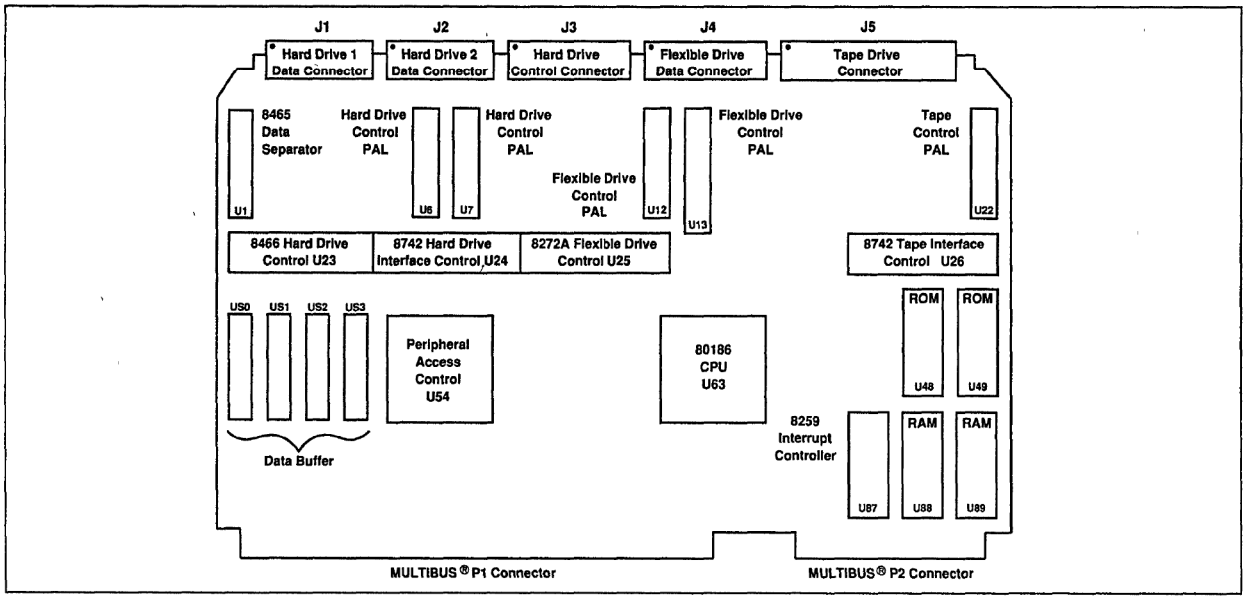


Figure 2: Connectors and Major Components of iSBC 221 Peripheral Controller

INTERFACE SUPPORT

	Interface	Transfer Rate
Hard Disk (up to 2)	EDSI	up to 10 Mbit/sec
	ST506/412	5 Mbit/sec
Flexible Disk (up to 4)	SA 475	250/500 Kbit/sec
	SA 460/465	125/250 Kbit/sec
	SA 450/455	125/250 Kbit/sec
Streaming Tape (up to 4)	QIC-02	90/112.5 Kbit/sec (typical)

HIGH PERFORMANCE

I/O-bound applications are accelerated by the combination of the ESDI standard, a 128K data buffer, a 10 MHz 80 186 microprocessor, and a dual bus structure. The dual bus structure allows the iSBC 221 to concurrently transfer data between the controller and the peripheral devices and between the controller and the host.

WORLDWIDE SERVICE AND SUPPORT

Intel provides support for board repair or on-site service. Development support options include phone support, subscription service, on-site consulting and customer training.

QUALITY AND RELIABILITY TESTING

The iSBC 221 is designed and manufactured in accordance with Intel's high quality standards. We then verify quality through rigorous testing in our state-of-the-art Environmental Test Laboratory.

SPECIFICATIONS

PHYSICAL CHARACTERISTICS

Length:	12.0in (304.8 mm)
Width	6.75 in. (171.5 mm)
Approximate Weight:	24 oz (680 g)

POWER REQUIREMENTS

+5 VDC @ 4.5A maximum
±12V @ 0.5A

ENVIRONMENTAL REQUIREMENTS

Operating Temperature:	0 to 55° @ 200 LFM
Non-operating:	−55 to 85°C
Humidity:	0 to 90% non-condensing

REFERENCE MANUAL

iSBC 221 Peripheral Controller User's Guide Order #451210

DEVICE DRIVERS

Check the latest release of the following operating systems for details:

iRMX I	XENIX*
iRMX II	UNIX*
iRMX III	

* XENIX is a trademark of Microsoft, Inc.
UNIX is a trademark of American Telephone and Telegraph, Inc.

ORDERING INFORMATION

Order Code	Description
SBC221	Peripheral Controller