PRELIMINARY

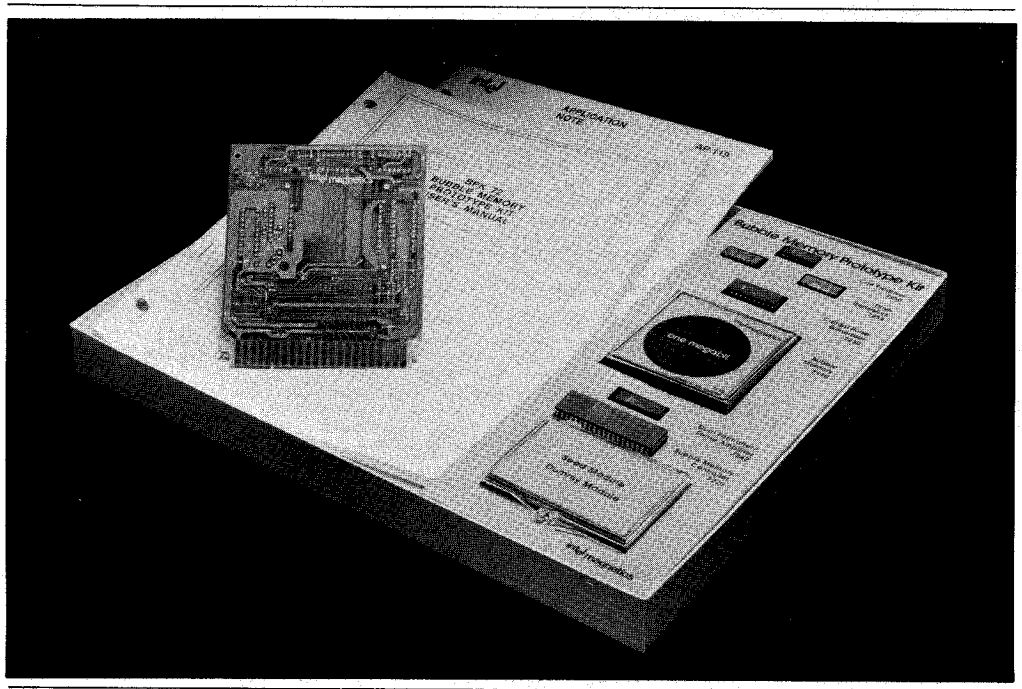
BPK 72
1 MBIT BUBBLE MEMORY PROTOTYPE KIT

BPK 72-1	0°–75° C
BPK 72-4	10°–55° C
BPK 72-5	–20°– 85° C

- **1 Mbit, Non-Volatile, Read-Write, High-Density, Bubble Storage Unit**
- **Operates from +5V and +12V Power Supplies**
- **Average Access Time of 48 ms**
- **Built-in Error Correction/Detection**
- **Complete with Components, Blank Board, Accessories and Documentation for Prototyping**
- **Powerfail Data Protection**
- **Maximum Data Rate of 100K bit/sec**
- **Compatible with 8080/85/86/88 and other Standard Microprocessors**

The BPK 72 prototype kit contains all the necessary items and documentation required to build a 1 Megabit bubble storage prototype system with a minimum of design effort. Thus this unit gives the design engineer the opportunity to learn the characteristics of a Bubble Memory System and to actually test the bubble in a prototype product. Application information on microprocessor interfacing is included in the kit.

Each of the components in the kit, i.e., 7110, 7220, 7230, 7242, 7250, 7254 are described in detail on the respective component data sheet.



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ORDER NUMBER: 210804-001

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ORDERING INFORMATION

Part Number	Temperature 7110 Magnetic Bubble Memory		Support Circuits Min. Operating Temperature	Description
	Operating	Non-Volatile Storage		
BPK 72-1	0° to 75°C Case	−40° to 90°C	0° to 70°C Ambient	1 Mbit Bubble Memory Prototype Kit
BPK 72-4	10° to 55°C Case	−20° to 75°C	10° to 55°C Ambient	1 Mbit Bubble Memory Prototype Kit
BPK 72-5	−20° to 85°C Case	−40° to 100°C	−20° to 85°C Ambient	1 Mbit Bubble Memory Prototype Kit

BPK 72 ITEMS

Item	Description	Part Number
1 MBit Bubble Memory	20-pin package which provides 1 megabit of non-volatile storage.	7110-1/7110-4/7110-5
Socket for 7110	Provides reliable mounting and removability to printed circuit boards.	7905
Seed Module	Recreates a lost seed bubble.	7901
VMOS Transistor	7230 Reference current switch.	7902
Dummy Module	Small PC board used in place of the 7110 during initial prototyping.	7900
Bubble Memory Controller	User interface, performs serial-to-parallel and parallel-to-serial data conversions. Generates timing signals.	7220-1/7220-5
Current Pulse Generator	Converts digital timing signals to analog current pulses suited to the drive requirements of the 7110 MBM. The CPG provides the replicate, swap, generate, boot replicate, and bootswap pulses required by the MBM.	7230/7230-4/7230-5
Dual Formatter/Sense Amp	Provides direct interface to the 7110 Bubble Memory. The FSA contains on-chip sense amplifiers, a full FIFO data block buffer, burst error detection and correction circuits, and circutiry for handling of the bubble memory redundant loops.	7242
Coil Predriver	Provides the high voltage, high current outputs to drive the 7254 Quad VMOS transistors.	7250
2 Quad VMOS Coil Drive Transistors	Switches the required current to drive the X and Y coils of the 7110 Bubble Memory.	7254
Prefabricated Printed Circuit Board		IMB 72
BPK 72 Bubble Memory Prototype Kit User's Manual	Literature	121685-002
Microprocessor Interface for the BPK 72 (AP-119)	Literature	210367

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SPECIFICATIONS

Capacity

128K Byte per BPK 72

Performance

Avg. Access Time .....48 msec
Maximum Data Transfer Rate ..... 100 Kbits/sec
Average Data Transfer Rate ..... 68 Kbits/sec

Data Organization

512 bits per page
2048 pages per BPK 70

Addressing Scheme

Logical page number

Environmental

Temperature: See Ordering Information
Operating Humidity: 0–95% Non-Condensing

BPK 72 POWER SUPPLY REQUIREMENTS

Voltage	Margin	Power Off/Power Fail Decay Rate
+12 Volt	±5%	less than 1.10 volts/msec
+5 Volt	±5%	less than 0.45 volts/msec

- Voltage sequencing—no restrictions
- Power on voltage rate of rise—no restrictions

BPK 72 POWER CONSUMPTION

BPK 72 KIT

Power (Watts)					
+5V (Maximum)	+12V (Maximum)	Total Active (Maximum)	Total Active (Typical)	Total Standby (Maximum)	Total Standby (Typical)
1.92	4.80	6.72	3.90	3.03	1.55

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