

# COMPATIBILITY GUIDE

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## Alpha Microsystems' Product Compatibility Guide

As Alpha Microsystems' releases new systems and new products, we are often asked if this new equipment is compatible with already existing products. The majority of our new releases can easily be integrated with previously released systems. However, there are some circuit boards that must have certain modifications implemented before they may be used with other products.

This article is designed to inform you which products are compatible; and what, if any, modifications are required to integrate these items. Some of our later systems do require that a certain version of our Software Release be used; this information is also included.

### Central Processing Units (CPUs)

#### AM-100 CPU

The AM-100 CPU is compatible with all existing Alpha Microsystems' products with the following exceptions.

1. AM-420 Disk Controller/AM-600-01 Combination

There are certain modifications that must be made to the AM-100 for use with the AM-420. Refer to the article included in this issue, "AM-100/AM-600-01 Modifications for Use with the AM-420."

2. The AM-100 CPU is not compatible with the AM-700 Memory Partition Controller Board

3. AM-960 Status Display

To use the AM-960 Status Display with this CPU requires the addition of an AM-965 Status Display Interface Board.

4. To insure AM-100 compatibility with the memory parity signal when an AM-120 or AM-710 is included in the system, the AM-100 Memory Parity Compatibility Enhancement procedure should be implemented. Refer to the *ISSG Newsletter*, Volume 3, Number 7, page 12 for this procedure.

#### AM-100/T, Revision C or earlier

The AM-100/T, Revision C or earlier CPU is compatible with all existing Alpha Microsystems' products with the following exceptions.

1. The AM-100/T is not compatible with the AM-200 Floppy Disk Controller Board

2. The AM-100/T is not compatible with the AM-12-01 (Pigeon 64K Memory Board)

3. To utilize this CPU with the AM-700 Memory Partition Controller Board (MPC), the modification described in the *ISSG Newsletter*, Volume 3, Number 10, page 6 must be done.

4. If an AM-700 MPC and an AM-600 Mag Tape Interface Board are included in the system with an AM-100/T, Revision C13 or F06 or earlier, then the AM-100/T DMA Compatibility procedure as described in the *ISSG Newsletter*, Volume 3, Number 7, page 11 must be implemented.

5. AM-960 Status Display

An AM-965 Status Display Board must be included in the system for AM-100/T Revision C and AM-960 compatibility.

6. Dual-level, power-fail for use with AM-120

To utilize the dual-level, power-fail feature, the procedure described in the *ISSG Newsletter*, Volume 3, Number 10, page 4 must be implemented. This procedure also requires Software Release 4.5 or later.

7.

This product requires that Software Release 4.4 or later be included on the system.

#### AM-100/T, Revision F

This CPU is compatible with all existing Alpha Microsystems' products except the following.

1. This CPU is not compatible with the AM-200 Floppy Disk controller board

2. This CPU is not compatible with the AM-12-01 (Pigeon 64K Memory Board)

3. This product requires that Software Release 4.4 or later be included on the system.

### Disk Controllers

#### AM-200

The AM-200 Floppy Disk controller board is compatible with all existing Alpha Microsystems' products with the following exceptions.

1. The AM-200 is not compatible with the AM-100/T CPU

2. The AM-200 is not compatible with the AM-210 Floppy Disk Controller because of I/O port address assignment conflicts

3. The AM-200 is not compatible with the AM-700 Memory Partition Controller

4. The AM-200 is not compatible with the AM-710 Memory Board

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## AM-420 Disk Controller

This board is compatible with all existing products except when used with an AM-600-01 in an AM-100 based system unless the procedure described in "AM-100/AM-600-01 Modifications for Use with the AM-420," included in this issue is implemented.

1. This product requires that Software Release 4.5a or later be included on the system.

## AM-600-01 Magnetic Tape Interface Board

The AM-600-01 is not compatible with the products listed below.

1. AM-700 MPC
2. AM-710 Memory Board
3. AM-420 used in conjunction with the AM-100 CPU unless the procedure "AM-100/AM-600-01 Modifications for Use with the AM-420," included in this issue of the newsletter is implemented.

## AM-600-02 Magnetic Tape Interface Board

This board is compatible with all existing Alpha Microsystems' products. However, the following items need certain modifications in order to be used with the AM-600-02.

1. AM-700 Memory Partition Controller

Refer to the procedure published in the *ISSG Newsletter*, Volume 3, Number 9, page 10.

2. AM-710 Memory Board

See the procedure described in the *ISSG Newsletter*, Volume 3, Number 8, page 4.

## AM-610 VCR Interface

This product requires that Software Release 4.6 or later be included on the system. Please be aware that a real-time driver is required when using this product. Refer to the Software documentation that accompanies the AM-610 for further information.

## AM-620 Streaming Tape Drive Interface

The AM-620 Interface board is compatible with all existing Alpha Microsystems' products. Please be aware that a real-time driver is required when using this product. Refer to the Software documentation that accompanies the AM-620 for further information.

1. If this product is to be used with an AM-100 CPU, an AM-120 must also be included in the system.

2. Software Release 4.6 or later must also be included on the system.

## Memory Boards

### AM-700 Memory Partition Controller Board

The AM-700 MPC is compatible with all existing Alpha Microsystems' products with the following exceptions.

1. The AM-700 is not compatible with the AM-200 Floppy Disk Controller
2. The AM-700 is not compatible with the AM-100 CPU
3. The AM-700 is not compatible with the AM-600-01 Magnetic Tape Interface
4. The AM-700 is not compatible with the AM-12-01 (Piiceon 64K Memory Board)
5. To use this board with the AM-19-01 (Piiceon 32K Word Memory Board), refer to Volume 3, Number 9 of this newsletter, "Memory Management Using the Memory Partition Controller Board," page 8.
6. AM-600-02 Magnetic Tape Interface  
Refer to the procedure published in the *ISSG Newsletter*, Volume 3, Number 9, page 10.
7. This product requires that Software Release 4.5 or later be used.

### AM-710 Memory Board

This memory board is compatible with all existing Alpha Microsystems' products with the following exceptions.

1. AM-200 Floppy Disk Controller
2. AM-600-01 Magnetic Tape Interface
3. AM-600-02 Magnetic Tape Interface  
See the procedure described in the *ISSG Newsletter*, Volume 3, Number 8, page 4.
4. This product requires that Software Release 4.4 or later be used.

## Input/Output Devices

### AM-120

To utilize this board, Software Release 4.5 or later must be included on the system.

# COMPATIBILITY GUIDE CONTINUED

Table II  
Product Compatibility Chart

AM-100	100/T	120	200	210	300	310	320	400	410	420	500	600	610	620	700	710	900	900/A	12-01	19-01
AM-100	N	Y	Y	Y	Y	Y	Y	Y	Y	Y*	Y	-01	Y	C	N	YA	Y	Y	Y	YA
100/TN		Y	N	Y	Y	Y	Y	Y	Y	Y	Y	-02	Y	Y	Y	Y	Y	Y	N	Y
120	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
200	Y	N	Y		N	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	Y	Y	Y	N
210	Y	Y	Y	N		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
300	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
310	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
320	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
400	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
410	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
420	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		-01N -02Y	Y	Y	Y	Y	Y	Y	Y	Y
500	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y	Y
600	-01	-02	Y	Y	YY	Y	Y	Y	Y	Y	-01N -02Y	Y			-01N -02Y	-01N -02Y	Y	Y	Y	-01N -02Y
610	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y	Y
620	C	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y	Y	Y	Y
700	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-01N -02Y	Y	Y		Y	Y	Y	N	Y
710	YA	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-01N -02Y	Y	Y	Y		Y	Y	Y	Y
900	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		Y	Y	Y
900/A	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			Y	Y
12-01	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y		Y
19-01	YA	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	-01N -02Y	Y	Y	B	Y	Y	Y	Y	Y

\*=Without AM-600  
A=Without AM-600 or AM-200  
B=Requires Modification  
C=Configuration Limitation

Y=Assumes both products are up to current revision level