

TC-3505 RAM/ROM EXPANSION CARD FUNCTIONAL DESCRIPTION

REV 0.91 01/17/90 WJS

The TC-3505 Memory Expansion card allows up to 8: EPROM or RAM memory modules to be placed on the data bus of a TC-3500 or TC-3550 Processor system. This additional memory may be used for stand-alone playback of large or long performances without requiring a full Show Control Computer. On-board addressing logic may be "jammed" to any location within the internal 20-bit memory address space, and will automatically increment the address on each read or write access if desired. Data is byte wide (8 bits) and is buffered to and from the backplane buss. Jumper selectors for each socket allow several common EPROM or RAM types to be configured, from 64K to 256K bit parts.

Diagnostic routines are available in the Triad monitor for accessing, debugging and testing the TC-3505 in addition to system calls to access, read, or write (if applicable) memory loaded on the TC-3505 card.

The memory card is normally used to store Synthesis show data for playback in a Triad LDC (Laser Disc Controller), STU (Servo Terminal Unit), and Data or Remote Terminal Unit (DTU/RTU). Data may be downloaded directly into RAM, or burned in EPROM in an external PROM programmer.

The board measures 6.5" x 4.5" and is fitted with a 28/56 gold plated edge connector. All IC's are fully socketed.

Physical Dimensions:

4.5" x 6.5" printed circuit board
28/56 .125 center gold edge connector

Power Requirements:

+5 VDC @ 500 MA.

Related Documents:

PIN3505.TXT Pin assignments and application information
TC3505.ASM Assembly diagram

JUMPERS/SWITCHES





The TC-3505 RAM/ROM Expansion card contains a total of eight 28 pin DIP sockets which can be configured for 64k static RAM, 256k static RAM or 256k ROM. Each of the eight sockets has three jumpers (A, B and C) for memory type configuration. It is possible to intermix the different types of memory on a single TC-3505.







There are a total of nine jumpers on a TC-3505. J1 through J8 are only associated with memory type and are located above each of the 28 pin DIP sockets.







J9 determines memory bank selection.

J1 THROUGH J8					
A.	Pin 1 A14	B.	Pin 1 A13	C.	Pin 1 A14
	Pin 2 1		Pin 2 26		Pin 2 27
	Pin 3 VCC		Pin 3 VCC		Pin 3 R/W -

MEMORY CONFIGURATION JUMPER MATRIX

6264 64K STATIC RAM					
A.	Pin 1	B.	Pin 1	C.	Pin 1
	Pin 2		Pin 2 		Pin 2 
	Pin 3		Pin 3 		Pin 3 
	No Jumpers		Jumpers 2 and 3		Jumpers 2 and 3

43256 STATIC RAM					
A.	Pin 1 	B.	Pin 1 	C.	Pin 1
	Pin 2 		Pin 2 		Pin 2 
	Pin 3		Pin 3		Pin 3 
	Jumpers 1 and 2		Jumpers 1 and 2		Jumpers 2 and 3

27256 EPROM					
A.	Pin 1	B.	Pin 1 	C.	Pin 1 
	Pin 2 		Pin 2 		Pin 2 
	Pin 3 		Pin 3		Pin 3
	Jumpers 2 and 3		Jumpers 1 and 2		Jumpers 1 and 2

J9: Auto roll-over memory bank select option
 Contact Triad for Proper Jumper Selection.

I/O PORTS**Free Edge Buss Connector
Rear View**

SOLDER SIDE		COMPONENT SIDE
+5VDC	2—1	+5VDC
	4 3	
	6 5	
	8 7	
	10 9	
	12 11	
	14 13	
	16 15	
	18 17	
	20 19	
	22 21	
	24 23	DATA 0
	26 25	DATA 1
	28 27	DATA 2
BOARD SELECT	30 29	DATA 3
	32 31	DATA 4
	34 33	DATA 5
	36 35	DATA 6
	38 37	DATA 7
	40 39	ADDRESS 0
	42 41	ADDRESS 1
	44 43	ADDRESS 2
	46 45	ADDRESS 3
	48 47	
	50 49	R/W*
	52 51	
	54 53	
GROUND	56—55	GROUND

VCC = 5VDC @ ____ ma.

NOTES