

MF-1000 Serial Interface Card

The CAT-700 supports the MF-1000 Serial Interface Card. Driven by a 24 bit serial word with supporting clock, data, and strobe signals, the MF-1000 card will convert the serial signal to a series of latched parallel outputs. Table 1 defines the 24 output.

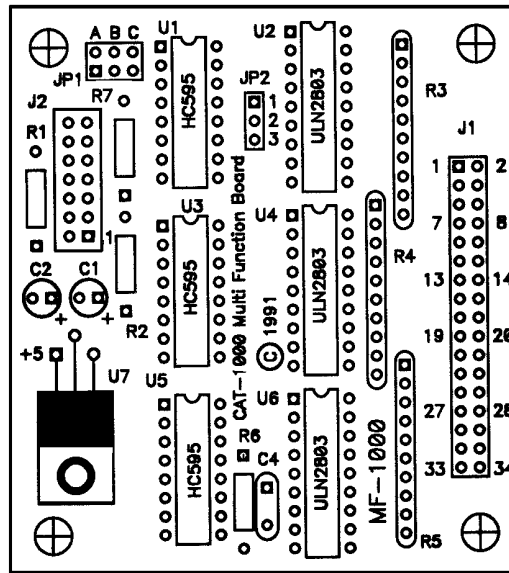
OUTPUT	DESCRIPTION
J1-1	Expanded User Function Output Zone #8 Channel #8
J1-2	Expanded User Function Output Zone #8 Channel #7
J1-3	Expanded User Function Output Zone #8 Channel #6
J1-4	Expanded User Function Output Zone #8 Channel #5
J1-5	Expanded User Function Output Zone #8 Channel #4
J1-6	Expanded User Function Output Zone #8 Channel #3
J1-7	Expanded User Function Output Zone #8 Channel #2
J1-8	Expanded User Function Output Zone #8 Channel #1
J1-9	Expanded User Function Output Zone #7 Channel #8
J1-10	Expanded User Function Output Zone #7 Channel #7
J1-11	Expanded User Function Output Zone #7 Channel #6
J1-12	Expanded User Function Output Zone #7 Channel #5
J1-13	Expanded User Function Output Zone #7 Channel #4
J1-14	Expanded User Function Output Zone #7 Channel #3
J1-15	Expanded User Function Output Zone #7 Channel #2
J1-16	Expanded User Function Output Zone #7 Channel #1
J1-17	Expanded User Function Output Zone #6 Channel #8
J1-18	Expanded User Function Output Zone #6 Channel #7
J1-19	Expanded User Function Output Zone #6 Channel #6
J1-20	Expanded User Function Output Zone #6 Channel #5
J1-21	Expanded User Function Output Zone #6 Channel #4
J1-22	Expanded User Function Output Zone #6 Channel #3
J1-23	Expanded User Function Output Zone #6 Channel #2
J1-24	Expanded User Function Output Zone #6 Channel #1
J1-25	+5VDC Output
J1-26	+12VDC Output
J1-27	Ground
J1-28	Ground
J1-29	Ground
J1-30	Ground
J1-31	Ground
J1-32	Ground
J1-33	Ground
J1-34	Ground

MF-1000 Output Definitions
Table 1

The twenty-four outputs are open collector darlington relay drivers. Each driver can sink up to 200 ma. and switch 40 VDC. Place diodes across the relay coils to protect the driver from negative spikes produced when the relay coil collapses.

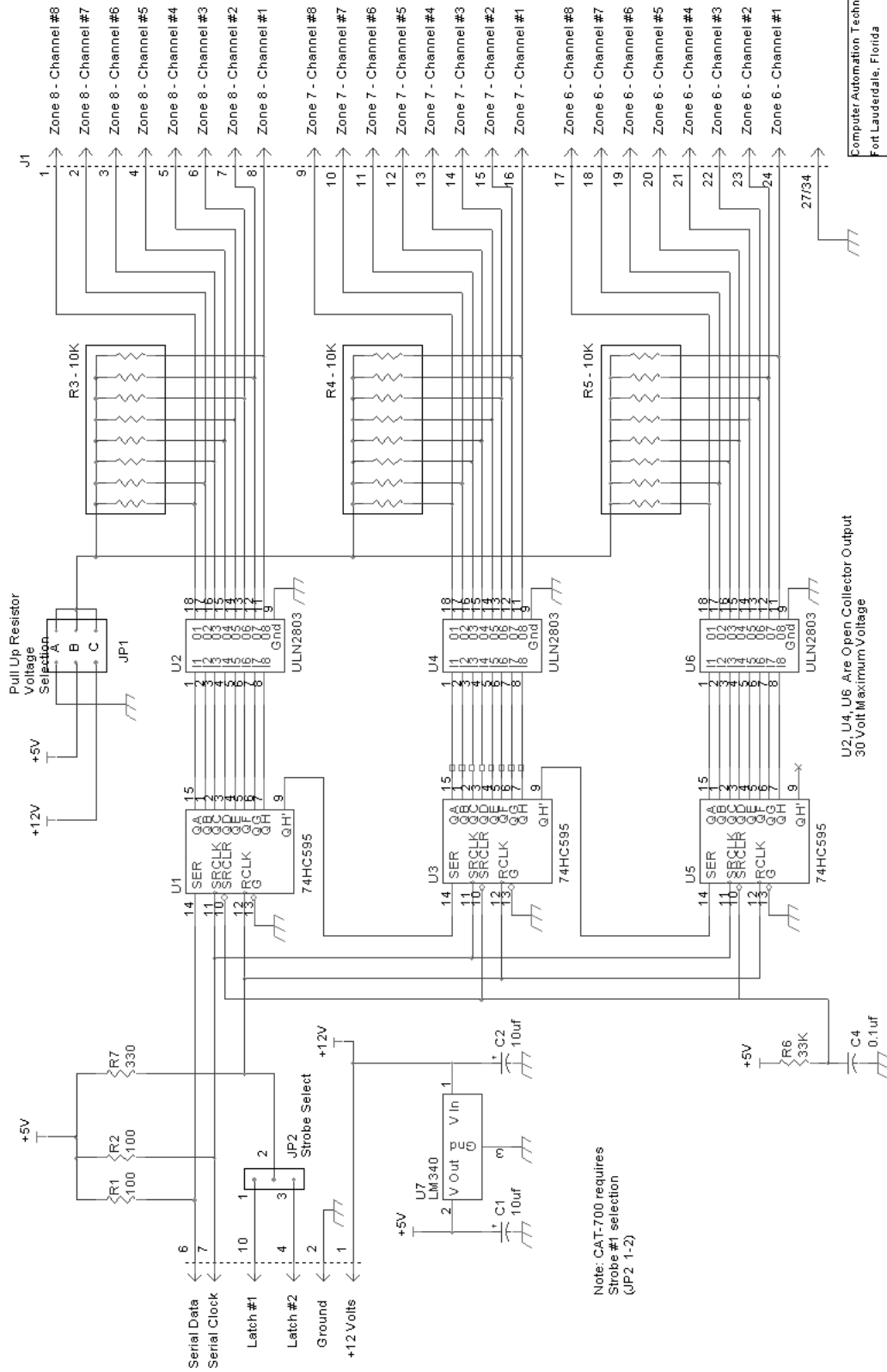
Jumper Selection

Jumper JP1 sets the logic level of the twenty-four outputs. With the jumper in position "C" all outputs are pulled up to +12VDC through 4700 ohm resistors. In position "B" the outputs are pulled up to +5VDC. In position "A" the outputs are pulled down to ground. JP2 selects the serial strobe input. This jumper should be between JP2 pins 1 and 2.



MF-1000 Multi Function Board

2	Resistor	100 5% 1/4W	R1, R2
3	Resistor	4.7K 10 pin	R3, R4, R5
1	Resistor	33K 5% 1/4W	R6
1	Resistor	330 5% 1/4W	R7
2	Capacitor	10uF 15V	C1, C2
1	Capacitor	0.1uF 50V	C4
3	I.C.	74HC595	U1, U3, U5
3	I.C.	ULN2803A	U2, U4, U6
1	I.C.	7805	U7
1	Header	2X17	J1
1	Header	2x7	J2
1	Header	2X3	JP1
1	Header	1X3	JP2
2	Jumper		
1	Cable	Ribbon 2X7	



Note: CAT-700 requires
Strobe #1 selection
(JP2 1-2)

U2, U4, U6 Are Open Collector Output
30 Volt Maximum Voltage

Computer Automation Technology, Inc. Fort Lauderdale, Florida			
Title MF-1000 Multi Function Board For CAT-700			
Rev B	Doc# MAF-1000	Rev A	
Date: Friday, December 22, 2000	Sheet 1 of 1		