
6809 UNIBOARD ERRATA

Pin 15 of U22 is connected to +5 VDC. This is in error. If your board is not yet socketed, Pin 15 may be cut on the TOP or component side of the PCB. If your board is assembled then just bend out pin 15 from the socket. The present connection to +5 VDC will not keep the board from working, it just causes U22 to run a little warm.

The top lead of pot R23 is not connected to anything. This is wrong. This lead MUST be connected to +12 VDC in order for the disk controller to work. This TOP lead of R23 must be jumpered to +12 VDC. An easy place to pick up +12 VDC is at Pin 40 of U23. The schematic shows that the top lead is connected to +5 VDC, this is incorrect.

Some kits were shipped without the 79L05 voltage regulator, we have enclosed this part.

Please accept our apology for not finding these errors earlier. We wish to thank AYDIN MICROWAVE of San Diego, CA. for their pointing out these bugs.

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UNIBOARD MISCELLANEOUS ADDENDA

1.0 MONITOR FIRMWARE

Several enhancements have been added to the monitor firmware in order to allow use of the serial port as the console device. The user can now select via the position of DIP switch S1 which device will be used for the console I/O. The firmware changes include the addition of a command to set the serial channel baud rate, additional routines to input and output via the serial port, and expansion to the vector table to facilitate access of the added I/O routines.

1.1 NEW COMMAND LIST

COMMAND	FORMAT
-----	-----
GO TO ADDRESS	G <start> <end>
COMM. BAUD RATE SET	C <6551 baud rate>
ALTER MEMORY	A <address>
FILL MEMORY	F <start> <end> <constant>
MOVE MEMORY	M <start> <end> <destination>
DISPLAY MEMORY	D <start> <end>
TEST MEMORY	T <start> <end>
READ SECTOR	R <drive> <trk/sector> <address>
WRITE SECTOR	W <drive> <trk/sector> <address>
BOOT NORMAL FLEX	B
BOOT UNKNOWN FLEX	U
BOOT GENERAL FLEX	L

1.1.1 COMMUNICATIONS BAUD RATE SET COMMAND

This command accepts a hex digit (0-F) and sets it in the 6551 ACIA device baud rate register. The corresponding baud rates are as follows:

VALUE	BAUD RATE
-----	-----
0	16X external
1	50
2	75
3	110
4	134.58
5	150
6	300
7	600
8	1200
9	1800
A	2400
B	3600
C	4800
D	7200
E	9200
F	19200

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UNIBOARD MISC. ADDENDA

LOCATION		LABEL	DESCRIPTION
-----		-----	-----
\$FFB0	F3C7	UAINNE	SERIAL PORT INPUT- NO ECHO
\$FFB2	F3E4	UAIN	SERIAL PORT INPUT
\$FFB4	F38D	UASTAT	SERIAL PORT INPUT STAT. CK.
\$FFB6	F3EC	UAOT	SERIAL PORT CHAR. OUTPUT
\$FFB8	F276	KBINNE	KEYBOARD CHAR. INPUT - NO ECHO
\$FFBA	F28F	KBIN	KEYBOARD CHARACTER INPUT
\$FFBC	F26C	KBST	KEYBOARD INPUT STAT. CK.
\$FFBE	F29A	VIDOT	VIDEO CHARACTER OUTPUT
\$FFC0	F260	INCHNE	INPUT CHARACTER-NO ECHO
\$FFC2	F5EF	TMOFF	TURN TIMER OFF
\$FFC4	F5F5	TMON	TURN TIMER ON
\$FFC6	F5D6	TNINT	INITIALIZE THE TIMER
\$FFC8	F25C	STATUS	CONSOLE INPUT STATUS CHECK
\$FFCA	F268	TOUTCH	CONSOLE CHARACTER OUTPUT
\$FFCC	F264	TINCH	INPUT CHARACTER
\$FFCE	F43F	DREAD	READ SECTOR
\$FFD0	F459	DWRITE	WRITE SECTOR
\$FFD2	F4CD	DVERFY	VERIFY SECTOR
\$FFD4	F4D5	RESTOR	RESTORE DRIVE
\$FFD6	F48D	DRIVE	SELECT DRIVE
\$FFD8	F4ED	DCHECK	CHECK DRIVE READY
\$FFDA	F537	DQUICK	QUICK CHECK DRIVE READY
\$FFDC	F42C	DINIT	INITIALIZE DISK DRIVER
\$FFDE	F43E	DWARM	INITIALIZE DISK DRIVER (WARM START)
\$FFE0	F475	DSEEK	SEEK TO TRACK
\$FFE2	F4C4	DSWIDE	SWITCH DENSITY SELECT
\$FFE4	F54A	DFNDTR	FIND CURRENT TRACK
\$FFE6	F552	DFNDDE	FIND CURRENT DENSITY SELECT
\$FFE8	F55A	WTRK	WRITE ENTIRE TRACK
\$FFEA	F3FA	PNTIN	INITIALIZE PRINTER DRIVER
\$FFEC	F40D	PNTCK	CHECK IF PRINTER READY

1.3 NEW DATA MEMORY

The monitor uses RAM locations from address \$EE00 to \$EEFF. The user stack is initialized to location \$EEFF. The system stack is initialized to location \$EDFF. Locations \$EE00 to \$EE48 are used internally by the I/O routines and other monitor functions.

The following locations may be of special interest to the system user:

LOCATION	BYTES	DESCRIPTION
-----	-----	-----
\$EE00	2	SWI3 vector
\$EE02	2	SWI2 vector
\$EE04	2	FIRQ vector
\$EE06	2	IRQ vector
\$EE08	2	SWI vector
\$EE0A	2	NMI vector
\$EE0C	1	Floppy disk control latch image

UNIBOARD MISC. ADDENDA

\$EE0D	1	Floppy disk controller status after interrupt
\$EE0E	1	Currently selected drive number
\$EE0F	4	Current track table
\$EE13	4	Current density select
\$EE17	1	Printer ready flag
\$EE18	1	Disk drive configuration byte
\$EE19	2	Console input (no echo) vector
\$EE1B	2	Console status check vector
\$EE1D	2	Console input (and echo) vector
\$EE1F	2	Console output vector