REVISIONS				
REV	ECO #	DESCRIPTION	DATE	APPROVAL
A		INITIAL RELEASE	6/6/03	J. DOMBROWSKI

LAST DSP BOARD
BIT SELECTOR

MT15

V+3.3

C16 470PF
C17 470PF
C18 470PF

C15 470PF
DO NOT INSTALL

GND

DSP CONNECTOR

P9

V+3.3

GND

MOUNTING HOLES

MT3 MT4 MT5 MT6 MT7 MT8 MT9 MT10 MT11 MT12 MT13 MT14

C1 C2 C3 C4 C5 C6 C7 C8 C9 C10 C14 C13
470PF DO NOT INSTALL

GND

MOTHER BOARD
INTERCONNECT
CONNECTOR

BOTTOM ENTRY

"AUDIO IN 1A
"AUDIO IN 1B
"AUDIO IN 2A
"AUDIO IN 2B
"AUDIO IN 3A
"AUDIO IN 3B
"512FS IN A
"512FS IN B
"FS IN A
"FS IN B
SYS STM H
SYS STM L
192 CLK H
192 CLK L
A STAT H
A STAT L
A CTL H
A CTL L
A LATCH H
A LATCH L
SP H
SP L
KPALIVE
"PDI
"RST

J1

GND

POWER CONNECTOR

-19 VOLTS	J2	1
+19 VOLTS	J2	2
+5 VOLTS	J2	3
+3.3 VOLTS	J2	4
GROUND (-19V RETURN)	J2	5
GROUND (+19V RETURN)	J2	6
GROUND (+5.5V RETURN)	J2	7
GROUND (+3.3V RETURN)	J2	8

-19V
+19V
V+5
V+3.3
GND

<50 IS MASTER CLOCK PIN; +5V IS MASTER, GND IS SLAVE.

MOTHER BOARD
INTERCONNECT
CONNECTOR
J3

"AUDIO OUT1A
"AUDIO OUT1B
"AUDIO OUT2A
"AUDIO OUT2B
"AUDIO OUT3A
"AUDIO OUT3B
"512FS OUT A
"512FS OUT B
"FS OUT A
"FS OUT B
SYS STM H
SYS STM L
192 CLK H
192 CLK L
A STAT H
A STAT L
A CTL H
A CTL L
A LATCH H
A LATCH L
SP H
SP L
KPALIVE
"PDI
"RST

DSP BUSES 1 to 16 LVDS
DSP BUSES 17 TO 32 LVDS
DSP BUSES 33 TO 48 LVDS
12.288 MHz LVDS
48 kHz LVDS
"OR"ed LOGIC DATA 96 BITS LVDS
SYS/SERIAL CLOCK 384kHz LVDS
AUTOMATION STATUS 160 BITS LVDS
AUTOMATION COMMANDS 160 BITS LVDS
AUTOMATION LATCH 192kHz LVDS

BOTTOM ENTRY

GND

INPUT MODULE 1 CONNECTOR — P1
INPUT MODULE 2 CONNECTOR — P2
INPUT MODULE 3 CONNECTOR — P3
INPUT MODULE 4 CONNECTOR — P4
INPUT MODULE 5 CONNECTOR — P5
INPUT MODULE 6 CONNECTOR — P6
INPUT MODULE 7 CONNECTOR — P7
INPUT MODULE 8 CONNECTOR — P8

V+3.3
GND

"256FS A
"FS A
"AUDIO 1 A
"256FS B
"FS B
"AUDIO 1 B
"CTL DATA A
"CTL DATA REQ 1 A
"CTL DATA B
"CTL DATA REQ 1 B
SYS STM H
192 CLK H
SYS STM L
192 CLK L
A STAT H
A CTL H
A LATCH H
A STAT L
A CTL L
A LATCH L
SP H
SPARE BT1
SP L
SPARE BT2

"AUDIO 2 A
"AUDIO 2 B
"CTL DATA REQ 2 A
"CTL DATA REQ 2 B

"AUDIO 3 A
"AUDIO 3 B
"CTL DATA REQ 3 A
"CTL DATA REQ 3 B

"AUDIO 4 A
"AUDIO 4 B
"CTL DATA REQ 4 A
"CTL DATA REQ 4 B

"AUDIO 5 A
"AUDIO 5 B
"CTL DATA REQ 5 A
"CTL DATA REQ 5 B

"AUDIO 6 A
"AUDIO 6 B
"CTL DATA REQ 6 A
"CTL DATA REQ 6 B

"AUDIO 7 A
"AUDIO 7 B
"CTL DATA REQ 7 A
"CTL DATA REQ 7 B

"AUDIO 8 A
"AUDIO 8 B
"CTL DATA REQ 8 A
"CTL DATA REQ 8 B

R1 100
R2 100
R3 100
R6 100
R7 100

MIDDLE MOTHER BOARD
CODE IS : 0xx

MB2 MB1 MB0

slot2 slot1 slot0

KPALIVE
"PDI
"RST

+19V
-19V
V+5

STRAIGHT,PINSELF,DIN,THOLE,SOLDER

MIDDLE MOTHER BOARDS

22 INPUT FRAME	CODE : 011	MT2 CODE : 010		
30 INPUT FRAME	CODE : 011	MT2 CODE : 010	MT1 CODE : 001	
38 INPUT FRAME	CODE : 011	MT2 CODE : 010	MT1 CODE : 001	MT1 MT2 CODE : 000

"MB2" IS FIXED TO GROUND

MIDDLE MOTHER BOARD POSITION
BIT SELECTOR

MB1 MT1
MB0 MT2

V+3.3

R5 100K
R4 100K

MB1
MB0

C11 C12
470PF DO NOT INSTALL

GND

APPROVALS	DATE
D. NGUYEN	5/21/02
J. DOMBROWSKI	6/6/03

USED ON BMX DIGITAL

HARRIS CORPORATION BROADCAST SYSTEMS DIVISION
DESIGNS BY PACIFIC RESEARCH & ENGINEERING

SCHEMATIC
MIDDLE MOTHER BOARD
SPINNAKER

SIZE	DRAWING NUMBER	REV
D	92-1352	A

6-4-2003_15:17

SHEET 1 OF 1