REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
0.1	NEW RELEASE	EASTERN CIRCUITS	10/24/11	
1.0	ECO2012-013	EASTERN CIRCUITS	03/21/12	

REFERENCE DESIGNATIONS	
LAST USED	NOT USED
C97	C7-10,12,13,14,73,74,75,76,79,88,89
D10	
F1	
FER4	
J7	
LED3	
P1	
R61	
RN17	RN3
TP14	
U26	U1,3,4,5,11,14,15,17,19,20,23,24,25
VR5	
Y1	

NOTES:

1. MASK PADS FOR TP'S BEFORE SOLDERING.
2. BREAK OFF STRIPS AT COMPLETION OF ASSEMBLY.
3. TRIM ALL COMPONENT LEADS TO .06 MAX FROM THE TOP SURFACE OF PCB AFTER SOLDERING.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN INCHES
TOLERANCES ARE :
.XX +/- .010 .XXX +/- .005

MATERIAL

FINISH

DO NOT SCALE THIS DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN EASTERN CIRCUITS	03/21/12
CHECKED	
ENGINEERING	
QUALITY	
MANUFACTURING	

ANALOG DEVICES
20 Cotton Road
Nashua, New Hampshire 03063
(603) 883-2430 FAX (603) 882-2655

ASSEMBLY DRAWING TOP SIDE
VIDEO DECODER EZ-EXTENDER BOARD

SIZE B | DWG. NO. ASSMAA0253-2010 | REV. 1.0

SCALE 1 : 1 | SHEET 1 OF 2

REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
0.1	NEW RELEASE	EASTERN CIRCUITS	10/24/11	
1.0	ECO2012-013	EASTERN CIRCUITS	03/21/12	

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005	CONTRACT NO.		ANALOG DEVICES — 20 Cotton Road, Nashua, New Hampshire 03063, (603) 883-2430 FAX (603) 882-2655
	APPROVALS	DATE	
MATERIAL	DRAWN EASTERN CIRCUITS	03/21/12	ASSEMBLY DRAWING BOTTOM SIDE VIDEO DECODER EZ-EXTENDER BOARD
	CHECKED		
FINISH	ENGINEERING		SIZE B — DWG. NO. ASSMAA0253-2010 — REV. 1.0
	QUALITY		
DO NOT SCALE THIS DRAWING	MANUFACTURING		SCALE 1 : 1 — SHEET 2 OF 2

REVISIONS				
REV	DESCRIPTION OF CHANGE	DRFTR	DATE	APPROVED
0.1	NEW RELEASE	EASTERN CIRCUITS	10/24/11	
1.0	ECO2012-013	EASTERN CIRCUITS	03/21/12	

PANEL DETAIL

X-OUTS ARE ALLOWED

UNLESS OTHERWISE SPECIFIED

1. BOARD TO BE FABRICATED PER IPC-6012A, CLASS 2.
2. MATERIAL: POLYCLAD FR-370HR OR EQUIVALENT. OUTER LAYERS 1/2 OZ/SQFT CU
   INNER LAYERS 1/2 OZ/SQFT CU FINISHED .062 (.056 MIN .076 MAX SEE DETAIL).
   VENDOR MAY ADJUST THICKNESS TO FULFILL NOTE 9.
3. PLATING: ADDITIONAL CU PLATING 1 OZ/SQFT
   ALL HOLES PLATED THROUGH, EXCEPT AS NOTED IN HOLE LEGEND.
   MINIMUM PTH BARREL THICKNESS = 0.0008" MINIMUM AVERAGE
   PER IPC-6012A WITH AMENDMENT 1, CLASS 2 REQUIREMENTS.
   WITH NO SINGLE MEASUREMENT LESS THAN 0.00071 IN THE PLATED HOLES.
4. FINISH: SURFACES TO BE COATED BY ENIG OF 2 TO 10 MICROINCHES OVER
   A MINIMUM OF 60-200 MICROINCHES OF LOW STRESS NICKEL.
5. SOLDERMASK: SOLDER MASK TO BE TRANSPARENT GREEN LPI BOTH SIDES PER GERBER FILES.
6. SILKSCREEN: WHITE EPOXY INK, APPLY TO BOTH SIDES PER GERBER FILES.
7. ARTWORK: MINIMUM FEATURE SIZE = 0.00394
   MINIMUM AIR GAP = 0.00361
8. ALL DIMENSIONS ARE IN INCHES.
9. CONTROLLED IMPEDANCE: BOARD TO BE BUILT TO YIELD CONTROLLED IMPEDANCE
   CONTROLLED IMPEDANCE (+/-10%):
   ALL .00492" TRACES TO BE 50 OHM SINGLE ENDED.
   ALL .007" TRACES TO BE 100 OHM DIFFERENTIAL PAIRS.
10. THIEVING IS ALLOWED, UNLESS OTHERWISE SPECIFIED.
11. VIAS SHOULD BE COVERED ACCORDING TO ONE OF THE FOLLOWING METHODS.
    METHOD 1 IS PREFERRED.
    METHOD 1: VIAS MUST BE FILLED WITH SOLDERMASK MATERIAL AFTER
    ELECTROLESS NICKEL/IMMERSION GOLD AND BEFORE PRIMARY LPI MASK. AFTER THE
    FILL IS CURED, THE PRIMARY MASK IS THEN APPLIED WITH NO VIA APERATURES BOTH SIDES.

    METHOD 2: AFTER APPLICATION OF FULL BODY ELECTROLESS NICKEL/IMMERSION
    GOLD, APPLY PRIMARY MASK WITH REDUCED VIA APERTURES THAT ARE 6 MILS
    LARGER THAN DRILLED HOLE DIAMETER BOTH SIDES. THEN APPLY SOLDER MASK PLUG ON COMPONENT SIDE.
12. VIA HOLES (.006,.010) REQUIRE TANGENCY ONLY, INSTEAD OF ANNULAR RING.
13. TEARDROP PADS ARE ACCEPTABLE WHERE NEEDED.
14. USE IPC-D-356 NETLIST AS SUPPLIED FOR CHECKING.
15. BUILD AS 9.70" X 6.75" PANELIZED PCB, SEE DETAIL. X-OUTS ARE ALLOWED.
    V SCORE 7 LINES ON BOTH SIDES OF THE BOARD.
16. WHEN STEP AND REPEAT IS COMPLETE A SOLDERPASTE MASKS (GERBER FILES) ARE NEED
    FOR THE ASSEMBLY HOUSE FOR THE 9.70" X 6.75" PANEL.
    PLEASE SUPPLY TO KEVIN GAGNE AT ANALOG DEVICES.

SCORING DETAIL

SIZE	QTY	SYM	PLATED	TOL
0.006	62	+	YES	+0.003/-0.006
0.01	923	×	YES	+0.003/-0.010
0.028 x 0.087	3	A	YES	+/-0.003
0.04	18	D	YES	+/-0.003
0.04 x 0.1	3	B	YES	+/-0.003
0.047 x 0.1	3	C	YES	+/-0.003
0.047	15	E	YES	+/-0.003
0.052	8	1	YES	+/-0.003
0.085	3	F	YES	+/-0.003
0.12	2	G	YES	+/-0.003
0.028	1	H	NO	+/-0.003
0.043	1	J	NO	+/-0.003
0.065	2	L	NO	+/-0.003
0.078 x 0.1	2	Z	NO	+/-0.003
0.144	6	M	NO	+/-0.005

8 LAYER CONSTRUCTION DETAIL

SCALE : NONE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE : .XX +/- .010 .XXX +/- .005	CONTRACT NO.		ANALOG DEVICES 20 Cotton Road Nashua, New Hampshire 03063 (603) 883-2430 FAX (603) 882-2655
	APPROVALS	DATE	
MATERIAL SEE NOTES	DRAWN EASTERN CIRCUITS	03/21/12	FABRICATION DRAWING VIDEO DECODER EZ-EXTENDER BOARD
	CHECKED		
FINISH SEE NOTES	ENGINEERING		SIZE B DWG. NO. A0253-2010 REV. 1.0
	QUALITY		
DO NOT SCALE THIS DRAWING	MANUFACTURING		SCALE 1 : 1 SHEET 1 OF 1

J3 VGA
J1 Component
J4
J7 Composite
J2 S-Video
J6 HDMI B
J5 HDMI A
ANALOG DEVICES
DESIGNED BY ANALOG DEVICES INC.
VIDEO DECODER EZ-EXTENDER REV 1.0 © 2012
PART NUMBER: ADZS-DECODE-EX3
POWER

J1
J3
U9
U8
U7
C6
C5
C90
R5
C91
R4
R3
A1
U6
D2
D3
D1
F1
C93
C92
C89
C88
C87
C86
C85
C84
C83
C82
C81
C80
C79
C78
C77
C76
C75
C74
C73
C72
C71
C70
C69
C68
C67
C66
C65
C64
C63
C62
C61
C60
C59
C58
C57
C56
C55
C54
C53
C52
C51
C50
C49
C48
C47
C46
C45
C44
C43
C42
C41
C40
C39
C38
C37
C36
C35
C34
C33
C32
C31
C30
C29
C28
C27
C26
C25
C24
C23
C22
C21
C20
C19
C18
C17
C16
C15
C14
C13
C12
C11
C10
C9
C8
C7
C6
C5
C4
C3
C2
C1
U10
A4
R6
R7
R8
R9
R10
R11
R12
R13
R14
R15
R16
R17
R18
R19
R20
R21
R22
R23
R24
R25
R26
R27
R28
R29
R30
R31
R32
R33
R34
R35
R36
R37
R38
R39
R40
R41
R42
R43
R44
R45

GND
GND
GND
GND
GND
GND

5
5V
5V
VDD
5V
AVDD
CVDD
1_8V
TVDD
5V
5V

7
GND
GND
GND
GND
GND
GND

A0253-2010

7
GND
GND
GND
GND
GND
GND

A0253-2010