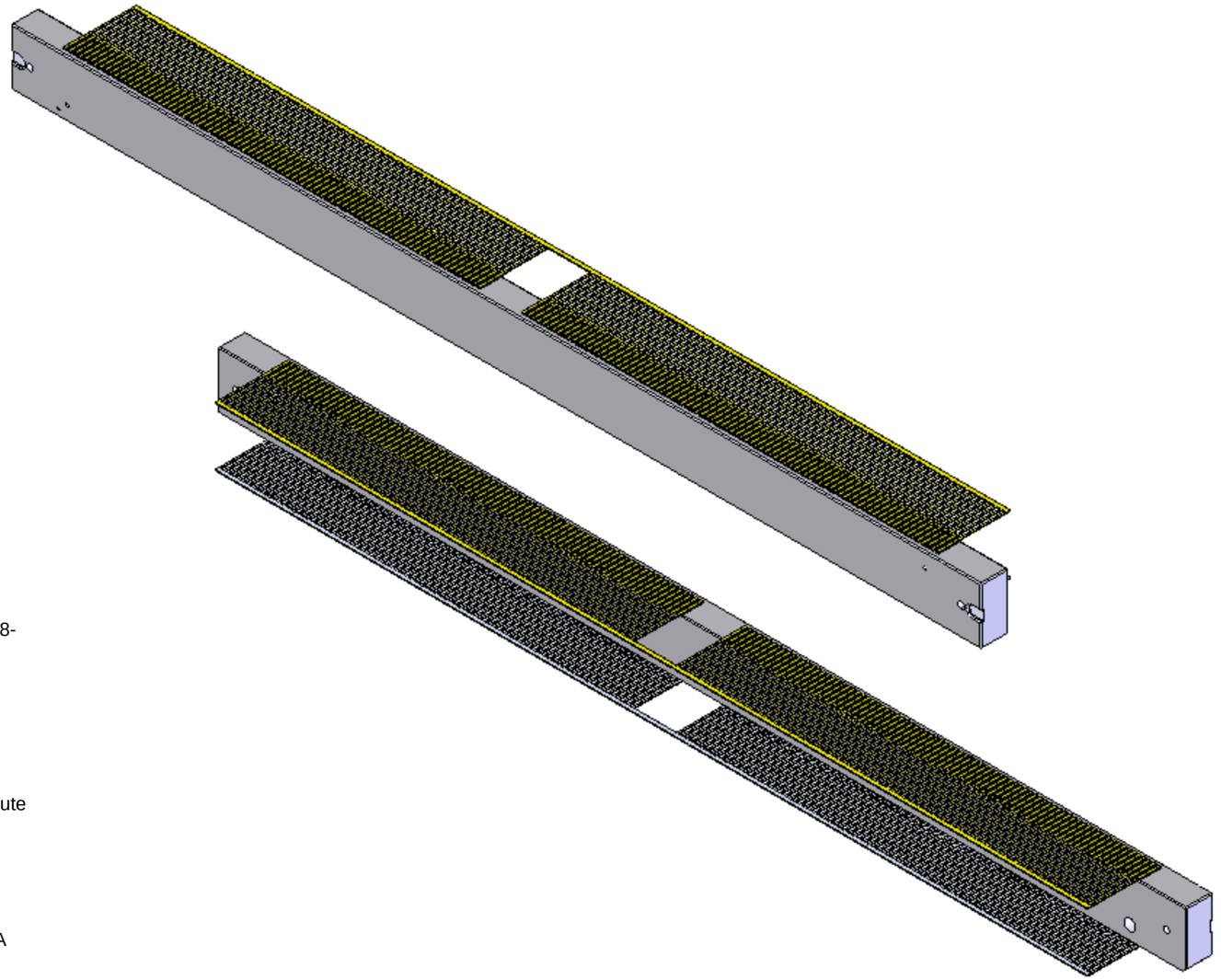
THIS DOCUMENT WAS PRODUCED IN SOLIDWORKS 2006

THIRD ANGLE PROJECTION

100% OF PARTS TO BE INSPECTED

REVISIONS ⟨#⟩					
REV.	ECN#	ZONE	DESCRIPTION	DATE	APPROVED
5			VACUUM PORTS MOVED, POCKETS ADDED TO ENDS.	2/8/2007	
6			NOTES CHANGED, MATERIAL AND FINISH BOXES IN TITLE BLOCK CHANGE, 100% PARTS TO BE INSPECTED NOTE ADDED.	2/14/2007	
7			PIN LENGTH CHANGED BUT PIN LENGTH AFTER FINAL TRIMMING STAYED THE SAME, REMOVED CASTELLATION, NOTES2 THRU 6 CHANGED.	2/28/2007	



NOTES
Unless otherwise specified:

1) Dimensions are to be interpreted per ASME Y14.5M-1994.

2) Material:
All materials meet NASA outgassing spec SP-R-0022A: TML<1.0%, CVCM<0.1%.
a) Substrate: AlN ceramic
b) Header metallization (traces): Thick-film Au or refractory metal alloy (TiW or MoMn)
c) Leadframe (pins): Alloy-42 or Kovar
d) Leadframe-attach: Solder (80-20 AuSn, for example) or brazing alloy with >+275 C melting point.

3) Finish
a) Ceramic surface roughness: 0.4~0.8um on faces -A- and -D-.
b) Header metallization (traces): Au top surface, 0.63um thick; suitable for ultrasonic wedge bonding with 33um (1.3 mil) diameter Al wire
c) Pins and pin-attach solder/brazing material: 0.63~1.3um (25~50 microinch) thick Au per ASTM B488-95, type II; plated over Ni.

4) Header metallized trace and ARC layout is specified by:
a) XX=01 (CCD21241 PAN header) traces per drawing 30959-2-04
b) XX=02 (CCD21121 MS header) traces per drawing 30960-2-04

5) All pins shorted by leadframe shorting bar.

6) Environmental Requirements: Passes 10 temperature cycles -30 C to +100 C, max slew rate Ò+/-5 C/minute without cracking, crazing, peeling, blistering, flaking, or delaminating of any layer.

7) Workmanship:
a) Ceramic substrate: Chipouts 0.5mm wide max.
b) Pins and leadframe: No sharp edges or burrs.

8) Lead integrity: Pins capable of passing MIL-STD-883G, test method 2004.5 Lead Integrity, test condition A (Tension), test condition B1 (Bending Stress), test condition B2 (Lead fatigue).

9) Insulation resistance (after cutting off shorting bar): <50nA at 50VDC (>1000M ohm) between any two pins.

10) Packaging: ESD-safe and suitable for class-100 cleanrooms. Tag with part number and revision level.

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MILLIMETERS
TOLERANCES ARE:
DECIMALS .X ± .1 .XX ± .07 .XXX ± .005
ANGLES ± 5°
FRACTIONS X/X ± 1/32
MATERIAL 2
FINISH 3
DO NOT SCALE DRAWING

CAD GENERATED DRAWING,
INTERPRET DRAWING PER ASME Y14.5M 1994

APPROVALS	DATE
DRAWN M. VASQUEZ	1/4/07
CHECKED	
RESP ENG D. DEBS	1/4/07
MFG ENG	
QUAL ENG	

Fairchild Imaging
1801 McCARTHY Blvd
Milpitas, CA 95035

TITLE:
HEADER CCD21241
and CCD21121

SIZE B | DWG. NO. 30947-8-05-XX | REV. 7

SCALE: 1/1 | CAGE CODE: 0BED2 | SHEET 1 of 2

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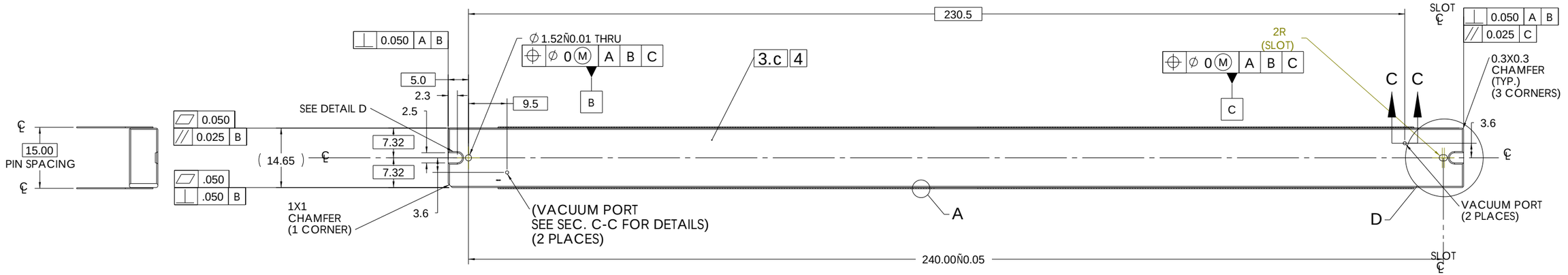
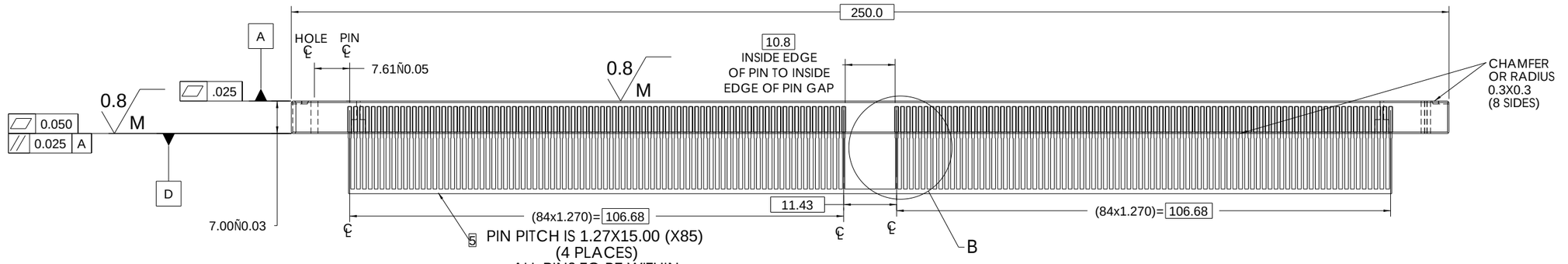
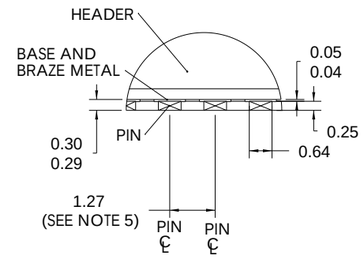
THIRD ANGLE PROJECTION

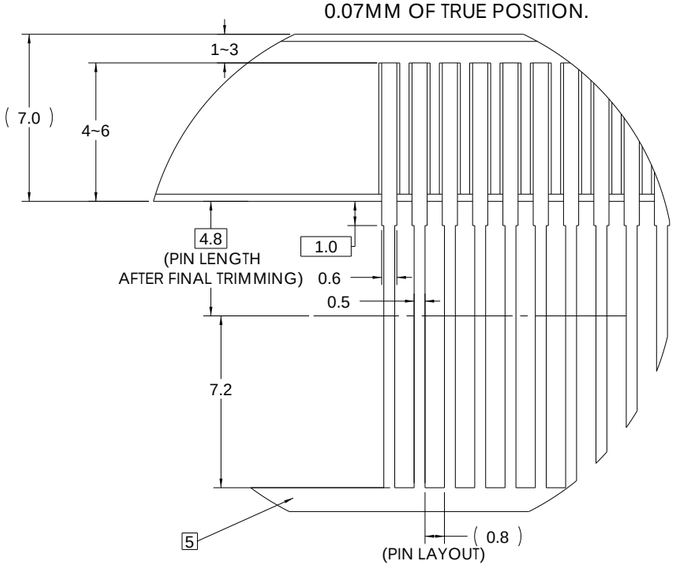
100% OF PARTS TO BE INSPECTED



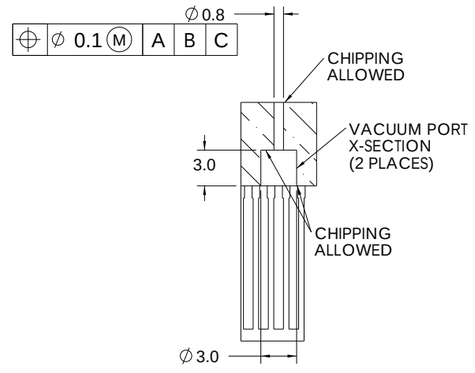




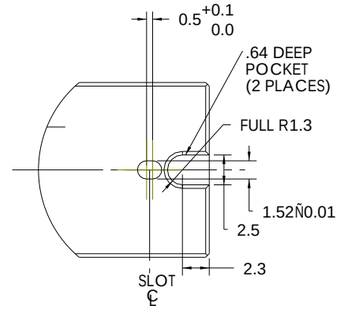
DETAIL A
SCALE 6 : 1



DETAIL B
SCALE 4 : 1



SECTION C-C
SCALE 2 : 1



DETAIL D
SCALE 2 : 1

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SIZE	DWG. NO.	REV.
B	30947-8-05-XX	7
SCALE: 1/1	CAGE CODE: 0BED2	SHEET 2 of 2