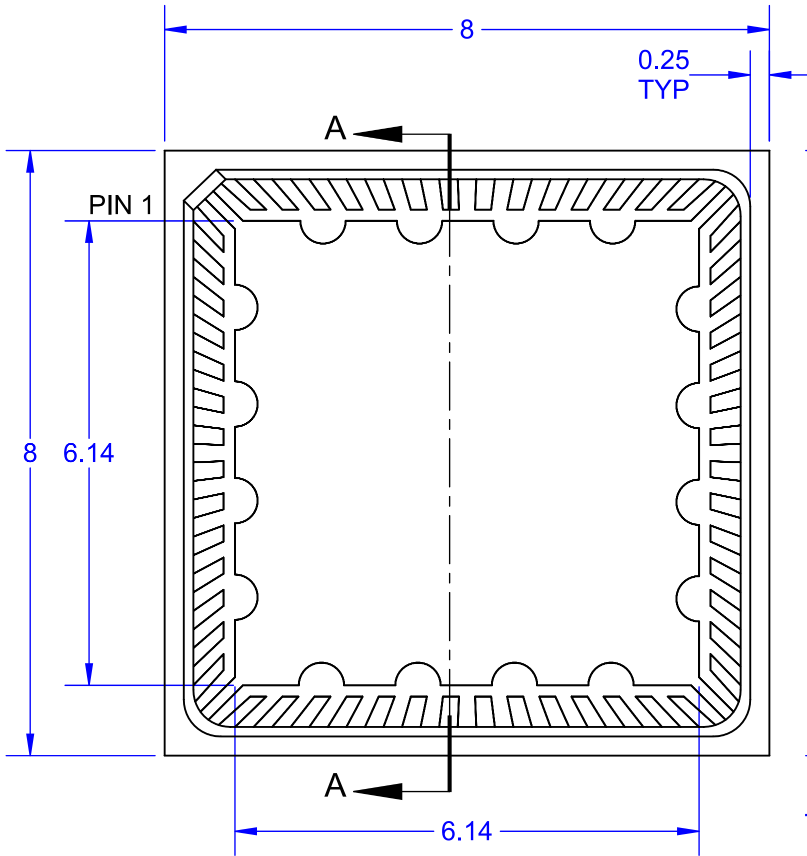
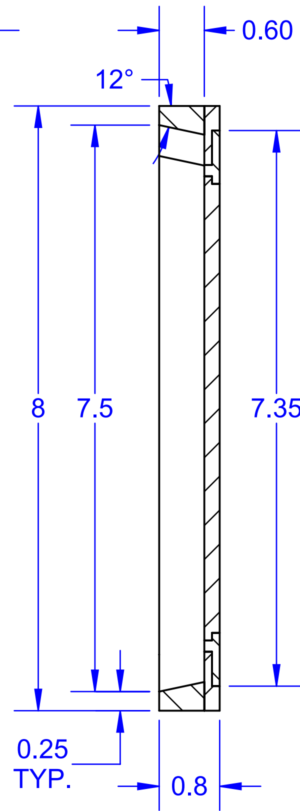
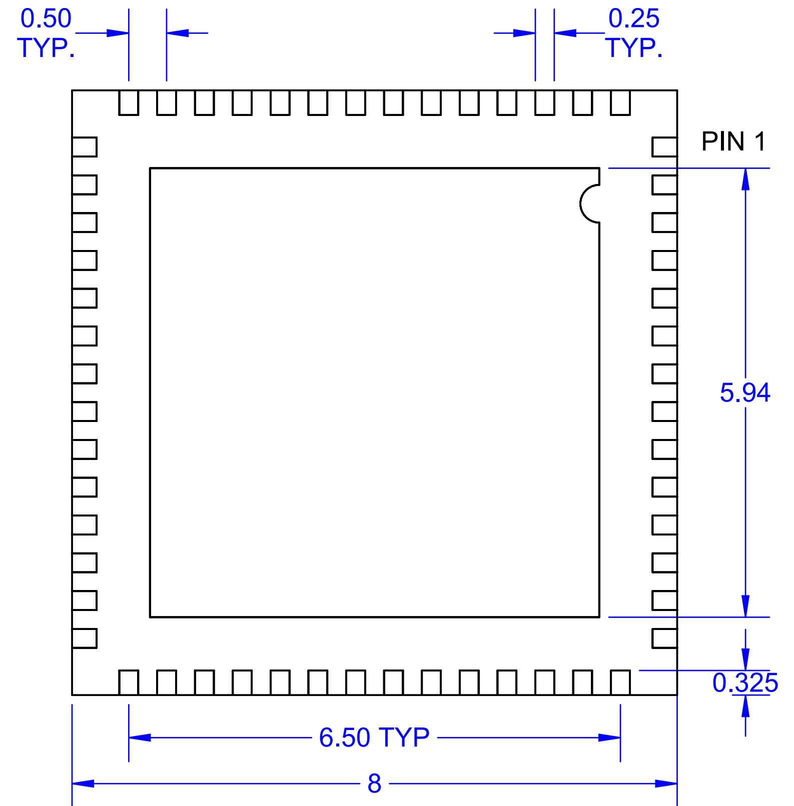
TOP VIEW



SIDE VIEW

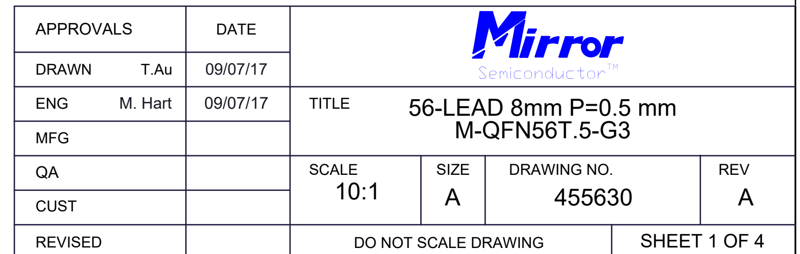


BOTTOM VIEW



SECTION A-A

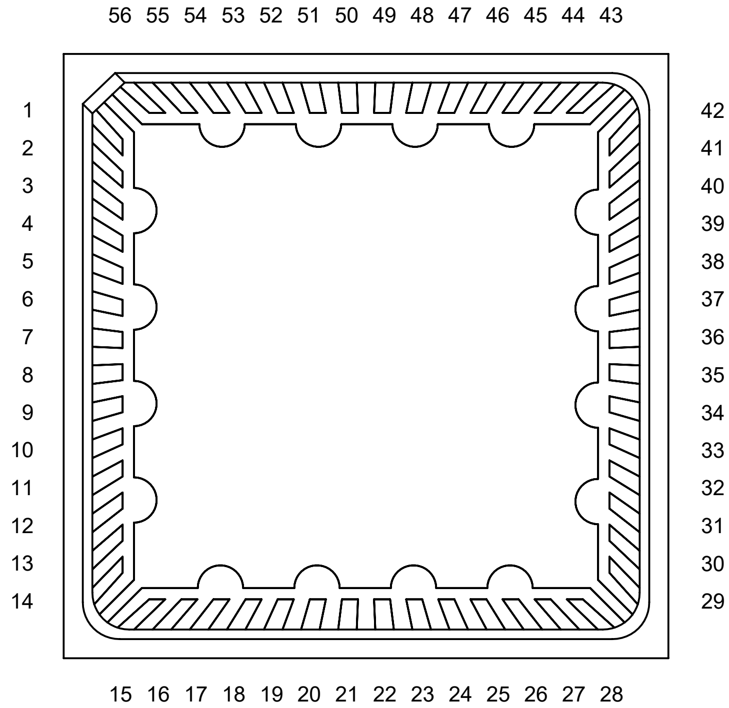
Notes: (Unless Otherwise Specified).
1) BODY: PLASTIC, SEMICONDUCTOR GRADE.
2) KEAD FRAME: COPPER, C-194 F/H.
3) LEAD FRAME PLATING: Ni Au.
4) FRAM THICKNESS: 0.203MM.
5) DIE PAD: 6.14 x 6.14 MM.
6) JEDEC OUTLINE: MO-220.
7) DIMENSIONS: MM.



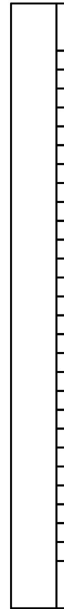
APPROVALS		DATE	
DRAWN	T.Au	09/07/17	Mirror Semiconductor™
ENG	M. Hart	09/07/17	TITLE 56-LEAD 8mm P=0.5 mm M-QFN56T.5-G3
MFG			
QA			SCALE 10:1 · SIZE A · DRAWING NO. 455630 · REV A
CUST			
REVISED			DO NOT SCALE DRAWING · SHEET 1 OF 4

PIN LOCATIONS

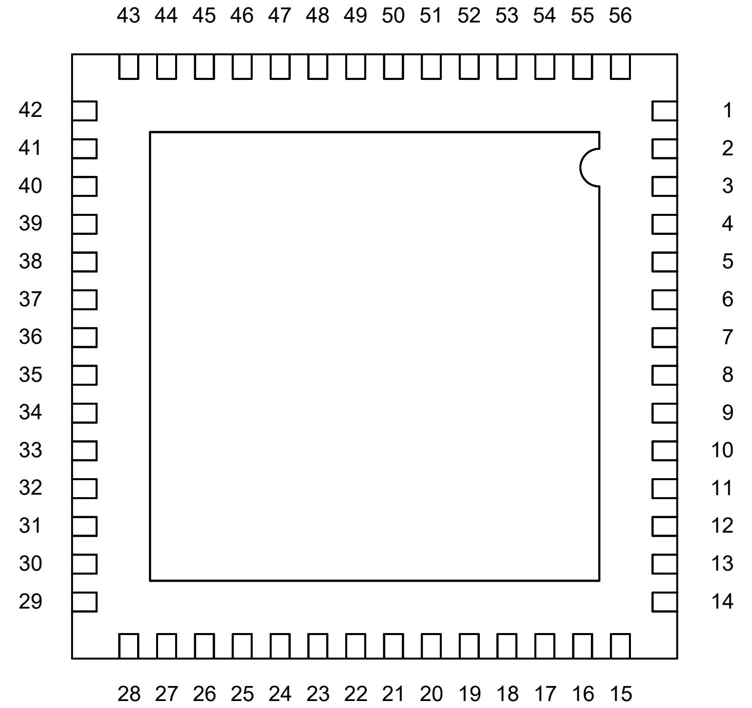
TOP VIEW



SIDE VIEW (BEFORE LID ATTACH)

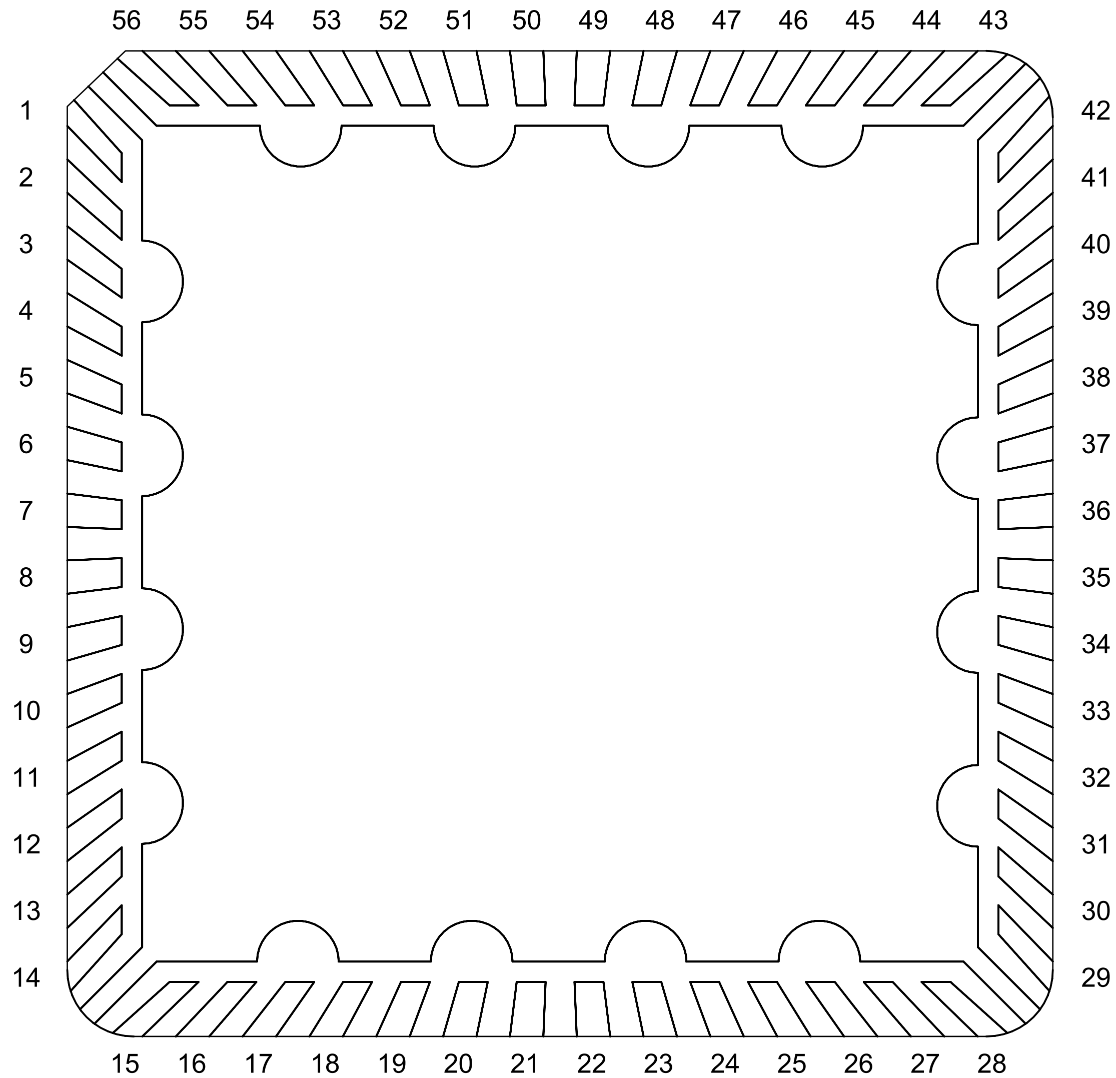


BOTTOM VIEW



TITLE	56-LEAD 8mm P=0.5 mm M-QFN56T.5-G3		
SCALE 10:1	SIZE A	DRAWING NO. 455630	REV A
DO NOT SCALE DRAWING		SHEET 2 OF 4	

BONDING DIAGRAM

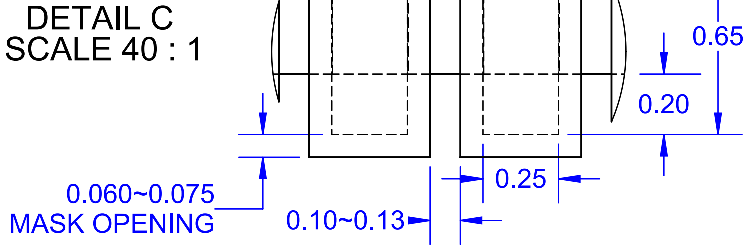


Mirror Semiconductor™

TITLE	56-LEAD 8mm P=0.5 mm M-QFN56T.5-G3		
SCALE 18:1	SIZE A	DRAWING NO. 455630	REV A
DO NOT SCALE DRAWING		SHEET 3 OF 4	

RECOMMENDED PC BOARD LAYOUT
DIMENSIONS IN MM

8.4
8
6.50
0.50
8.4 8 6.50
0.25
SOLDER MASK OPENING
PCB PAD
COMPONENT PAD
PCB THERMAL PAD
DESIGN OPTIONAL
SEE NOTE 7 & 8
SOLDER MASK OPENING
COMPONENT PAD
5.94 6.14
COMPONENT
OUTLINE
C



DETAIL C
SCALE 40 : 1

Notes: (Unless Otherwise Specified).

1) DIMENSIONS ARE PRESENTED ONLY AS A GUIDELINE.
   DESIGNERS SHOULD USE THEIR OWN KNOWLEDGE BASE WHEN DESIGNING THE PCB.
2) SURROUND EACH SIDE OF I/O PERIMETER PADS WITH 0.060~0.075 mm (NSMD) SOLDER MASK
   OPENING (2.4~3.0mils). OPTIONALLY OK TO USE RECTANGLE (NSMD) MASK OPENING AROUND I/O PADS.
3) ROUNDED PCB LAND PADS REDUCE SOLDER BRIDGING.
4) PCB LANDS SHOULD BE 0.2mm LONGER THAN THE PACKAGE I/O PADS.
5) THE WIDTH OF PERIMETER PCB PADS SHOULD MATCH (1:1) THE SAME WIDTH AS THE PACKAGE PADS.
6) REFER TO INDUSTRY REFERENCES SUCH AS IPC-SM-782 FOR PCB LAND PATTERN DESIGN.
7) THERMAL GROUND PADS MAY BE CHANGED TO SUITE REQUIREMENTS OF THE DESIGNER.
   A. MAKE COPPER THERMAL PAD AS LARGE AS POSSIBLE.
   B. DRILL MULTIPLE THERMAL VIAS 0.25~0.33mm DIAMETER USING 0.8~1.2mm PITCH GRID.
   C. PLATE THERMAL VIA BARRELS WITH 1-OUNCE COPPER (18um).
   D. TENT (COVER) THERMAL VIAS WITH SOLDER MASK 0.1mm LARGER THAN THE VIA DIAMETER.
8) STENCIL DESIGN MAY BE CHANGED TO SUITE REQUIMENTS OF THE DESIGNER.
   A. LASER CUT STENCIL 0.125mm (5mil) THICK. APERTURE SIZE-TO-LAND RATIO OF 1:1.
   B. THE SOLDER PASTE OPENING IN THE THERMAL PAD AREA SHOULD BE A MATRIX ARRAY OF
      SMALLER APERTURES INSTEAD OF ONE LARGE APERTURE TO CONTROL PASTE AMOUNTS.
   C. APPLY 50% TO 80% SOLDER PASTE COVERAGE IN THERMAL PAD AREA.

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TITLE	56-LEAD 8mm P=0.5 mm M-QFN56T.5-G3		
SCALE 12:1	SIZE A	DRAWING NO. 455630	REV A
DO NOT SCALE DRAWING		SHEET 4 OF 4	