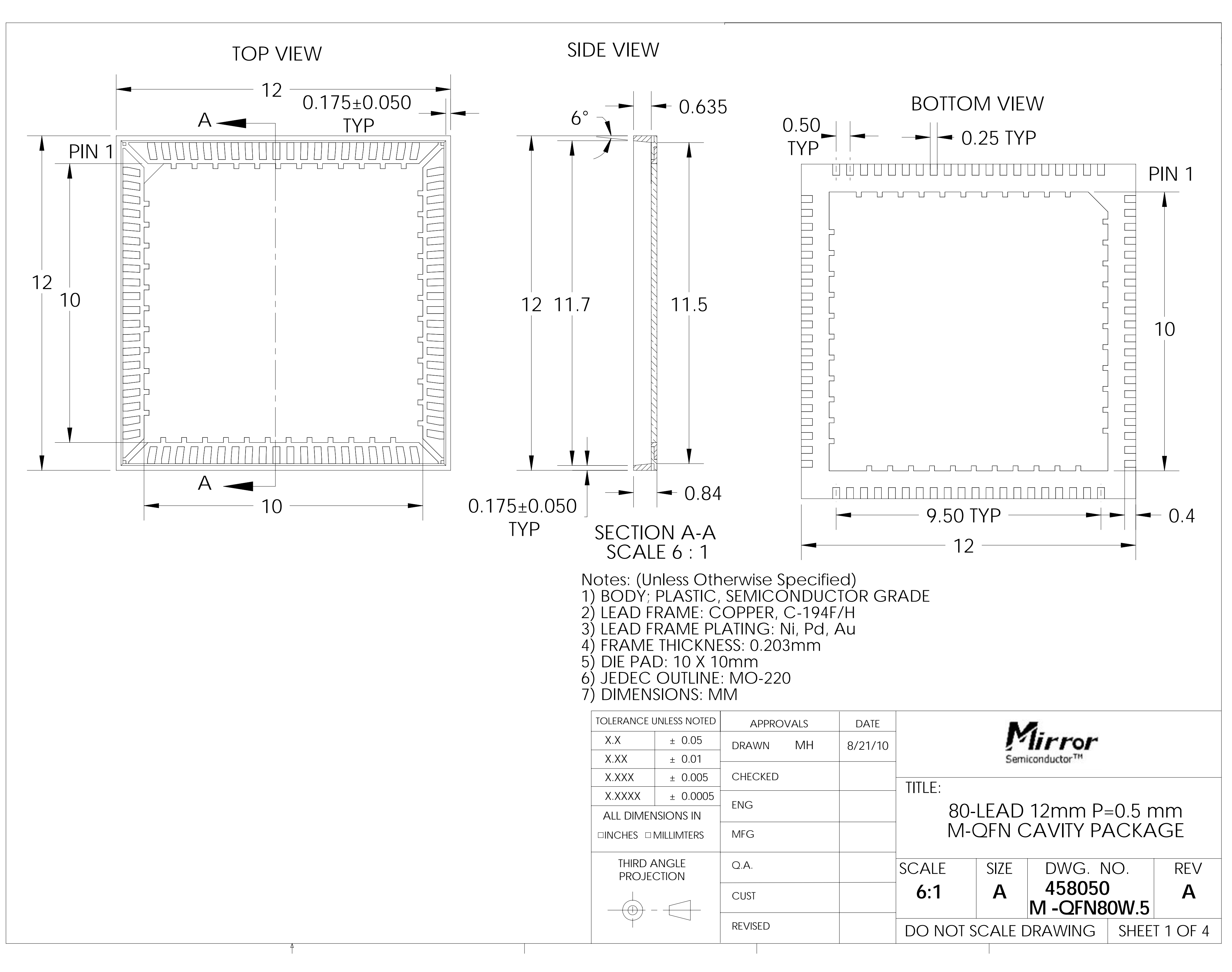
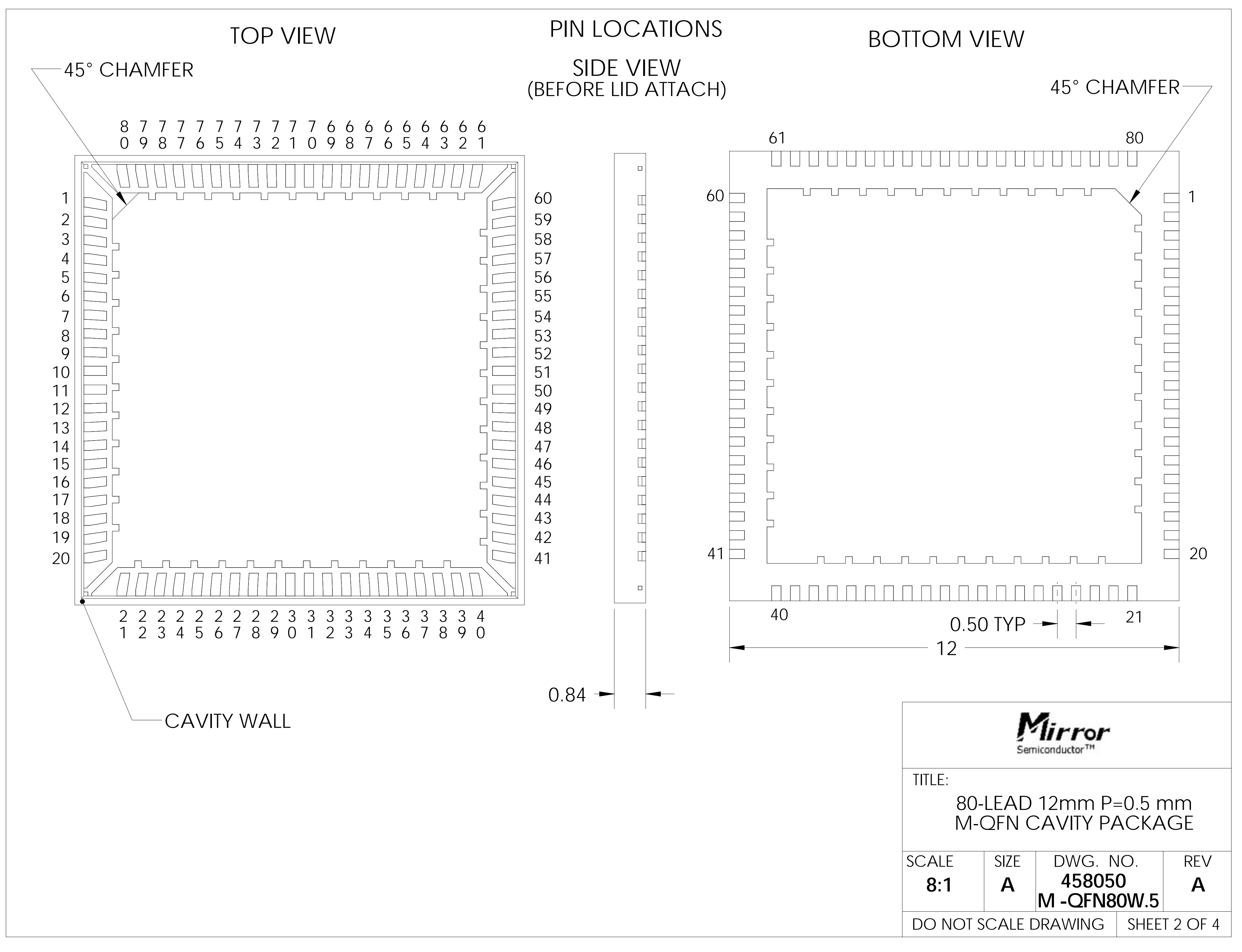
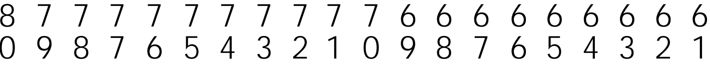
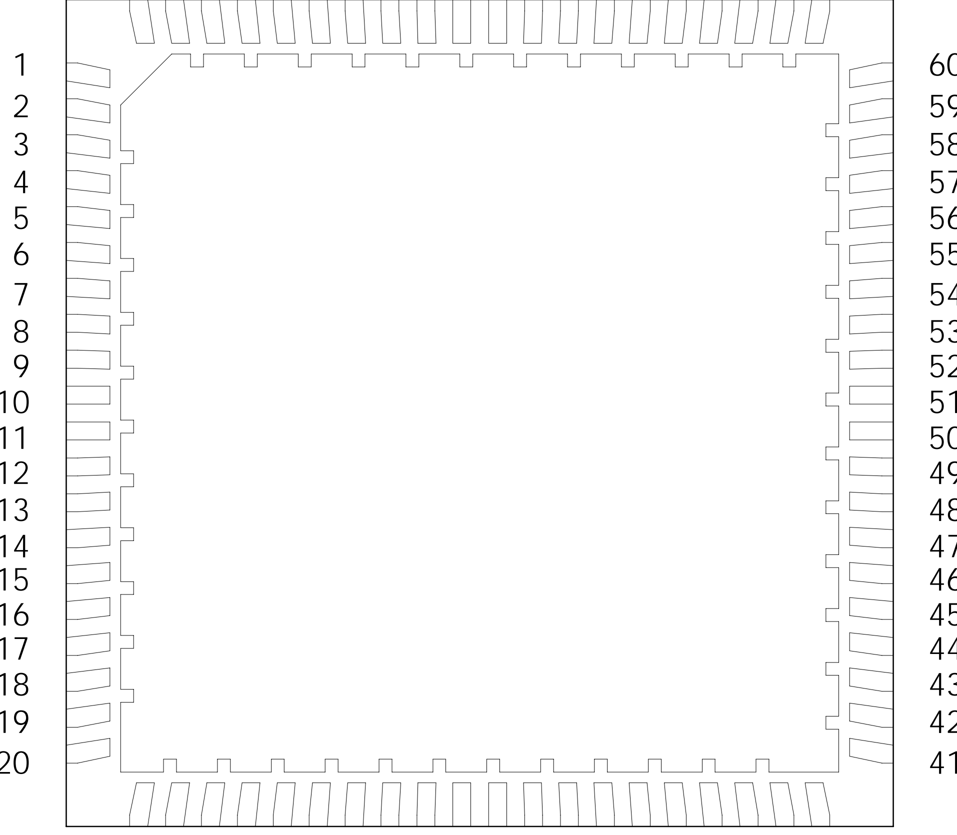

TOP VIEW
12
0.175±0.050
TYP
A
PIN 1
12
10
A
10
SIDE VIEW
6°
0.635
12
11.7
11.5
0.175±0.050
TYP
0.84
SECTION A-A
SCALE 6 : 1
BOTTOM VIEW
0.50
TYP
0.25 TYP
PIN 1
10
9.50 TYP
0.4
12
Notes: (Unless Otherwise Specified)
1) BODY; PLASTIC, SEMICONDUCTOR GRADE
2) LEAD FRAME: COPPER, C-194F/H
3) LEAD FRAME PLATING: Ni, Pd, Au
4) FRAME THICKNESS: 0.203mm
5) DIE PAD: 10 X 10mm
6) JEDEC OUTLINE: MO-220
7) DIMENSIONS: MM
TOLERANCE UNLESS NOTED
X.X ± 0.05
X.XX ± 0.01
X.XXX ± 0.005
X.XXXX ± 0.0005
ALL DIMENSIONS IN
INCHES MILLIMTERS
THIRD ANGLE PROJECTION
APPROVALS
DATE
DRAWN MH 8/21/10
CHECKED
ENG
MFG
Q.A.
CUST
REVISED
Mirror
Semiconductor™
TITLE:
80-LEAD 12mm P=0.5 mm
M-QFN CAVITY PACKAGE
SCALE 6:1
SIZE A
DWG. NO. 458050 M -QFN80W.5
REV A
DO NOT SCALE DRAWING
SHEET 1 OF 4


PIN LOCATIONS
TOP VIEW
SIDE VIEW
(BEFORE LID ATTACH)
BOTTOM VIEW
45° CHAMFER
45° CHAMFER
CAVITY WALL
0.84
0.50 TYP
12
Mirror
Semiconductor™
TITLE:
80-LEAD 12mm P=0.5 mm
M-QFN CAVITY PACKAGE
SCALE
8:1
SIZE
A
DWG. NO.
458050
M -QFN80W.5
REV
A
DO NOT SCALE DRAWING
SHEET 2 OF 4

BOND DIAGRAM





21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

TITLE:			
80-LEAD 12mm P=0.5 mm M-QFN CAVITY PACKAGE			
SCALE **9.5:1**	SIZE **A**	DWG. NO. **458050 M -QFN80W.5**	REV **A**
DO NOT SCALE DRAWING		SHEET 3 OF 4	

RECOMMENDED PC BOARD LAYOUT
DIMENSIONS IN MM

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. PAD CHAMFER ANGLE MAY VARY
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 (18µm).
   D. TENT (COVER) THERMAL VIAS WITH SOLDER MASK 0.1mm LARGER THEN THE VIA DIAMETER.
8) STENCIL DESIGN MAY BE CHANGED TO SUITE REQUIREMENTS 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 THE THERMAL PAD AREA.

TITLE:
80-LEAD 12mm P=0.5 mm
M-QFN CAVITY PACKAGE

SCALE	SIZE	DWG. NO.	REV
9.5:1	A	458050 M -QFN80W.5	A

DO NOT SCALE DRAWING |