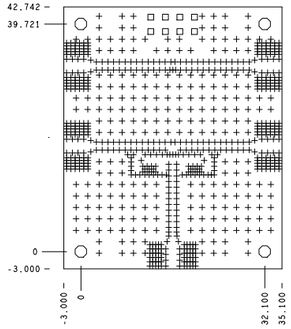
DWG NO.	SH	REV
PRT-92370	1	01

REVISIONS				
ZONE	REV		APPROVALS	DATE
	01	INITIAL RELEASE	J.DYKSTRA	09/15/23

NOTES: UNLESS OTHERWISE SPECIFIED:

1. INTERPRET DIMENSIONS AND TOLERANCES PER ANSI Y14.5M.
2. GERBER FILES CONTAIN BOARD OUTLINE FOR ALIGNMENT PURPOSES, REMOVE PRIOR TO FABRICATION.
3. FABRICATE PCB PER IPC-6012, LATEST REVISION, TYPE 3, CLASS 2. DETAILED NOTES AND INSTRUCTIONS ON THIS DRAWING SUPERCEDE IPC REQUIREMENTS. BARE BOARD ACCEPTANCE PER IPC-A-600, LATEST REVISION.
4. TRACE WIDTH/SPACE/VIA:
   TRACE WIDTHS/SPACING/VIA SIZE TO BE WITHIN ±20% OF GERBER DATA.
   MINIMUM TRACE WIDTH: OUTER LAYERS= 0.100
   INNER LAYERS= 0.110
   MINIMUM AIR GAP: OUTER LAYERS= 0.127 (0.005)
   INNER LAYERS= 0.127 (0.005)
   MINIMUM VIA PAD DIAMETER: 0.200
5. MATERIAL:
   NUMBER OF ELECTRICAL LAYERS IS 4
   MATERIALS AND OVERALL THICKNESS SEE STACKUP DETAIL.
   LAMINATE AND PREPREG PER IPC-4101. COPPER FOIL PER IPC-MF-150.
   MATERIAL'S GLASS TRANSITION TEMPERATURE (Tg) SHALL BE A MINIMUM OF 170° CENTIGRADE.
   MATERIAL MUST MEET UL796 WITH A FLAMMABILITY RATING OF 94V-0
   VENDOR UL LOGO AND DATE CODE TO BE SCREENED ON THE BOTTOM SIDE. IF NO BOTTOM SILKSCREEN PROVIDED VENDOR MAY ADD BOTTOM SILKSCREEN.
6. TOLERANCES:
   6A. LAYER TO LAYER REGISTRATION WITHIN 0.076 [0.003].
   6B. ALL HOLES TO BE LOCATED WITHIN 0.076 [0.003] OF ORIGINAL CAD DATA.
   6C. ALL HOLES SURROUNDED BY COPPER SHALL HAVE A MINIMUM ANNULAR RING OF 0.076 [0.003].
   6D. ALL PLATED THROUGH HOLES TO HAVE A MINIMUM 0.025 [0.001] OF PLATING.
   6E. HOLE DIMENSIONS AND TOLERANCES APPLY AFTER PLATING, SEE DRILL HOLE CHART.
   6F. WARP AND TWIST NOT TO EXCEED 0.254 mm/mm [0.010 IN/IN].
   6G. ALL PLATED THROUGH HOLES TO HAVE A MINIMUM 0.025 [0.001] OF PLATING.
7. PLATING OPTIONS: USE 7A
   7A. ENIG (ELECTROLESS NICKEL/IMMERSION GOLD) 2-10 MICROINCHES OF GOLD OVER A MINIMUM OF 120 MICROINCHES OF NICKEL PER IPC-4552. THIS FINISH COMPLIES WITH RoHS DIRECTIVES.
   ~~7B. SELECTIVE HARD GOLD FINISH IN THE BGT AND FCCCAB AREA(S), CLASS 1 50-150 MICROINCHES MICROINCHES MIN (KNOOP HARDNESS 130-200) OVER NICKEL PLATE IN ACCORDANCE WITH IPC-4552, LATEST REVISION, SECTION 4.5.2 5.45-2 (300-500 MICROINCHES THICK), FABRICATE IN ACCORDANCE WITH IPC 2613, START WITH 1/4 O.Z. COPPER~~
   ~~7C. HASL (HOT AIR SOLDER LEVEL) SMT PADS MUST BE FLAT TO A MAX OF 0.076 [0.003] ABOVE SURFACE. HASL FINISH TO BE USED ON TEST OR PROTOTYPE BOARDS ONLY. THIS FINISH DOES NOT COMPLY WITH RoHS DIRECTIVES.~~
   ~~7D. IAg IMMERSION SILVER 6-20 MICROINCHES PER IPC 4552.~~
8. APPLY LPI (LIQUID PROTO-IMAGEABLE) SOLDERMASK OVER BARE COPPER (SMOBC) PER IPC-SM-840 CLASS "T" TO BOTH SIDES OF PCB. SOLDERMASK COLOR TO BE: GREEN
   GERBER FILES REFLECT A ZERO OVERSIZE. VENDOR MAY OVERSIZE AS NEEDED, MAX THICKNESS 0.025 [0.001]. ACCEPTABLE FOR SOLDERMASK WEBBING TO DISAPPEAR BETWEEN FINE PITCH BALL PADS.
9. APPLY SILKSCREEN LEGEND USING WHITE NON-CONDUCTIVE EPOXY INK. TRIM SILKSCREEN FROM ALL EXPOSED COPPER. BOTH SIDE(s).
10. VENDOR MAY REMOVE NON-FUNCTIONAL PADS FROM INTERNAL LAYERS.
11. VENDOR MAY ONLY ADD THIEVING OUTSIDE THE BOARD OUTLINE TO COMPENSATE FOR LOW COPPER DENSITY.
12. REMOVE ALL BURRS AND BREAK SHARP EDGES, INSIDE CORNER MAXIMUM RADIUS 3.81[0.015].
13. BARE BOARD ELECTRICAL TEST IS REQUIRED. USE THE SUPPLIED IPC-D-356 NETLIST.
14. MATRIX DRAWING: USE 14A
   14A. NO MATRIX DRAWING IS REQUIRED. BOARDS TO BE DELIVERED FULLY ROUTED.
   ~~14B. MATRIX DRAWING PROVIDED, SEE FABRICATION DRAWING SHEET 2 OF 2~~
   ~~14C. VENDOR TO GENERATE MATRIX DRAWING. VENDOR GENERATED MATRIX DRAWINGS REQUIRE APPROVAL BY pSEMI CORPORATION. PANELIZED BOARDS TO HAVE SAME ORIENTATION AND SHALL BE ROUTED AND RETAINED WITH BREAK AWAY TABS. SEE DETAIL B. SUPPORT RAIL WIDTH TO BE 5.35[0.25] 12.7[0.50] WITH 1.52[0.060] FIDUCIALS AND 3.175[0.125] TOOLING HOLES IN 3 CORNERS. PANELIZED SOLDERPASTE GERBER TO BE SUBMITTED TO PSEMI CORPORATION.~~
15. PLANARITY: USE 15B
   ~~15A. VARIATION OF SMD PADS IN THE Z AXIS TO BE 6~~
   15B. ALL VIAS TO BE COPPER FILLED OR NON-CONDUCTIVE EPOXY FILLED AND COPPER OVERPLATED AFTER PLATING AND BEFORE FINAL SURFACE FINISH. NON-CONDUCTIVE EPOXY (SAN EI 900 OR EQUIVALENT) IS RECOMMENDED. EPOXY SHALL NOT PROTRUDE FROM HOLES. THIS APPLIES TO ALL VIAS THAT ARE EXPOSED ON BOTH SIDES. A SMOOTH COPLANAR FINISH IS REQUIRED WHEN EXPOSED BY SOLDERMASK.
   ~~15C. ALL VIAS ARE TO BE PLUGGED AND FILLED WITH SOLDERMASK MATERIAL~~
   ~~15D. MICROVIAS SHALL BE PLATED SHUT AND PLANARIZED. VOIDS IN MICROVIAS SHALL BE LIMITED PER IPC-6012.~~
16. CONTROLLED IMPEDANCE REQUIREMENTS: USE 16B
   VENDOR MAY MODIFY DIELECTRIC THICKNESS BY 25% WITHOUT WRITTEN CONSENT. ANY MODIFICATION GREATER THAN 25% REQUIRES WRITTEN CONSENT FROM pSEMI CORPORATION.
   ~~16A. NO CONTROLLED IMPEDANCE MEASUREMENTS REQUIRED~~
   16B. VENDOR TO PROVIDE TEST COUPON AND IMPEDANCE REPORT.
   0.300 TRACES ON LAYER 1 ARE 50 OHMS, CO-PLANAR TRANSMISSION LINE _X_ +/-10%.
17. SHORTS DESIGNED IN BOARD: NO
   ~~NET XXXXXX TO GND, LAYER 1~~
   ~~NET XXXXXX TO GND, LAYER 4~~
18. DEVIATIONS BY FABRICATION FACILITY TO BE REPORTED TO pSEMI CORPORATION.



DRILL CHART: TOP to BOTTOM

ALL UNITS ARE IN MILLIMETERS

FIGURE	FINISHED_SIZE	TOLERANCE_DRILL	PLATED	QTY
+	0.2	+0.0/-0.2	PLATED	798
□	1.0	+0.075/-0.075	PLATED	8
◯	3.2	+0.05/-0.05	NON-PLATED	4

TOTAL HOLES: 810

4 LAYER - STACK UP

CU

PRIMARY SIDE..SILKSCREEN			
PRIMARY SIDE..SOLDERMASK			
PRIMARY SIDE..L1			0.04318 FINISHED
INNER SIGNAL..L2	ROGERS RO4350B CORE	0.168mm	0.03556
	ISOLA 370HR (FILL A/R)	1.082mm	
GND PLANE..L3	ISOLA 370HR	0.168mm	0.03556
SECONDARY SIDE..L4			0.04318 FINISHED
SECONDARY SIDE..SOLDERMASK			
SECONDARY SIDE..SILKSCREEN			

TOTAL BOARD THICKNESS: 1.5748 ±10%

THIS DOCUMENT CONTAINS INFORMATION PROPRIETARY TO PSEMI CORPORATION. THE INFORMATION IN THIS DOCUMENT IS NOT TO BE USED OR DUPLICATED IN ANY MANNER WITHOUT THE PRIOR APPROVAL OF PSEMI CORPORATION.

TOLERANCES UNLESS OTHERWISE NOTED
X.X ± +/- .2.5/[.1]
X.XX ± +/- .25/[.01]
X.XXX ± +/- .127/[.005]
X.XXXX ± +/- .0127/[.0005]
ANGLES ± +/- 1/2 DEG

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN J. SAMBRANO	01/29/26
CHECKED J.DYKSTRA	01/29/26
ISSUED	
REVISIED BY	

COMPANY pSemi A Murata Company
9380 Carroll Park Drive
San Diego, CA, 92121
(858)731-9400 Phone
(858)731-9499 Fax

TITLE
PCB,
PE423213 MONEE EVB

SIZE	RoHS COMPLIANCE RELEASE DATE	DWG NO.	REV
B		PRT-92370	01

SCALE: NONE

SHEET: 1 OF 1