

1

2

3

4

5

6

A

B

C

D

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	Solder Resist	0.40mil	3.5	
1	Top Layer		1.40mil		
	Dielectric 1	FR-4	8.00mil	4.2	
2	Ground		1.40mil		
	Dielectric 2	FR-4	40.00mil	4.2	
3	Power		1.40mil		
	Dielectric 3	FR-4	8.00mil	4.2	
4	Bottom Layer		1.40mil		
	Bottom Solder	Solder Resist	0.40mil	3.5	
	Bottom Overlay				

Symbol	Quantity	Finished Hole Size	Plated	Hole Type	Drill Layer Pair	Hole Tolerance
✕	322	10.00mil (0.254mm)	PTH	Round	Top Layer - Bottom Layer	
■	56	12.00mil (0.305mm)	PTH	Round	Top Layer - Bottom Layer	
▼	5	26.00mil (0.660mm)	PTH	Round	Top Layer - Bottom Layer	
▽	3	33.47mil (0.850mm)	PTH	Round	Top Layer - Bottom Layer	
⚙	69	40.00mil (1.016mm)	PTH	Round	Top Layer - Bottom Layer	
⚙	8	42.91mil (1.090mm)	PTH	Round	Top Layer - Bottom Layer	
⊙	5	49.21mil (1.250mm)	PTH	Round	Top Layer - Bottom Layer	
○	8	51.18mil (1.300mm)	PTH	Round	Top Layer - Bottom Layer	
□	5	63.00mil (1.600mm)	PTH	Round	Top Layer - Bottom Layer	
⊕	4	125.98mil (3.200mm)	PTH	Round	Top Layer - Bottom Layer	
◇	2	23.62mil (0.600mm)	PTH	Slot	Top Layer - Bottom Layer	
	487 Total					

Slot definitions : Routed Path Length = Calculated from tool start centre position to tool end centre position.  
Hole Length = Routed Path Length + Tool Size = Slot length as defined in the PCB layout

64.77mm

102.20mm

1000.00mil

DESIGN INFORMATION

MIN. TRACK WIDTH: 10 MIL  
MIN. CLEARANCE: 0.2 mm  
MIN. VIA PAD SIZE: 20 MIL  
MINIMUM ANNULAR RING 0.05mm (2MIL) EXTERNAL  
PER IPC-D-275 CLASS 2 LEVEL C  
REGISTRATION TOLERANCES: METAL +/- 5 MIL, HOLES +/- 3 MIL  
HOLE SIZE TOLERANCE (UNLESS OTHERWISE SPECIFIED): +/- 3 MIL

MATERIAL:  
☐ FR-408 ☒ FR-4 High Tg ☐ OTHER  
THICKNESS: ☒ 62 MIL (1.6mm) +/-10% ☐ OTHER  
TOLERANCE: ☒ ANSI IPC-6012 TYPE 3 CLASS 2  
☐ OTHER +/-  
BOW & TWIST: ☒ ANSI IPC-6012 TYPE 3 CLASS 2  
☐ OTHER +/-

DRILLING:  
REFERENCE: ☒ AS SHOWN ☒ NC\_DRILL FILES  
PTH COPPER THICKNESS: ☒ 20-30 um ☐ OTHER

BOARD FINISH:  
SILKSCREEN: ☒ TOP ☒ BOTTOM  
SILKSCREEN COLOR: ☒ WHITE ☐ OTHER  
SOLDER RESIST COLOR: ☒ GREEN ☐ OTHER  
☒ MATTE ☐ SEMI-GLOSS

SURFACE FINISH: ☒ IMMERSION GOLD (ENIG) ☐ ENEPIG  
☐ IMM. TIN/SILVER OR EQUIV ☐ OTHER

ARRAY/PANEL: ☐ CUT AND TRIM PER M1 BOARD OUTLINE  
☐ N.C. ROUTE ☒ V. SCORE

CERTIFICATION: MATERIALS AND WORKMANSHIP FOR ALL PCBs TO MEET OR EXCEED THE REQUIREMENTS OF:  
☒ ANSI IPC-A-600F CLASS -> ☐ 1 ☒ 2 ☐ 3  
☒ RoHS ☐ OTHER PER ORDER

ALL BOARDS MUST MEET OR EXCEED UL94-V0 REQUIREMENTS.  
PCB MUST BEAR THE UL94V-0 UL REGISTERED MATERIAL ID NUMBER

ADDITIONAL REQUIREMENTS:  
MICROSECTION: ☐ YES  
BARE BOARD ELEC. TEST: ☐ NONE ☒ REQUIRED ☐ PER ORDER  
☐ XX MIL VIAS REQUIRE NON-CONDUCTIVE FILL AND PLANARIZE  
☐ XX MIL VIAS REQUIRE CONDUCTIVE FILL AND PLANARIZE  
☐ OUTER XX MIL TRACES REQUIRE 50 OHM SINGLE-ENDED IMPEDANCE  
☐ LAYER 2 & 3 (INNER LAYERS) XX MIL WIDE, XX MIL SPACE  
TRACES REQUIRE 100 OHM DIFFERENTIAL IMPEDANCE

TEXAS INSTRUMENTS

PROJECT TITLE:  
MC121EUM

DESIGNED FOR:  
Public Release

FILE NAME:  
MC121EUM\_E3.PcbDoc

ENGINEER:  
Eldho

LAYOUT BY:  
KRYPTON SOLUTIONS

SCALE: 1.00

ALTUM DESIGNER VERSION:  
23.1.1.15

ALL ARTWORK VIEWED FROM TOP SIDE

BOARD #: MC121EUM

REV: D

SUN REV: Not in version control

LAYER NAME = 00000-00000

TID #: N/A

PLOT NAME = Fabrication Drawing

GENERATED : 11/14/2025 10:08:46 AM

TEXAS INSTRUMENTS

Texas Instruments (TI) and/or its licensors do not warrant the accuracy or completeness of this specification or any information contained therein. TI and/or its licensors do not warrant that this design will meet the specifications, will be suitable for your application or fit for any particular purpose, or will operate in an implementation. TI and/or its licensors do not warrant that the design is production worthy. You should completely validate and test your design implementation to confirm the system functionality for your application.

1

2

3

4

5

6