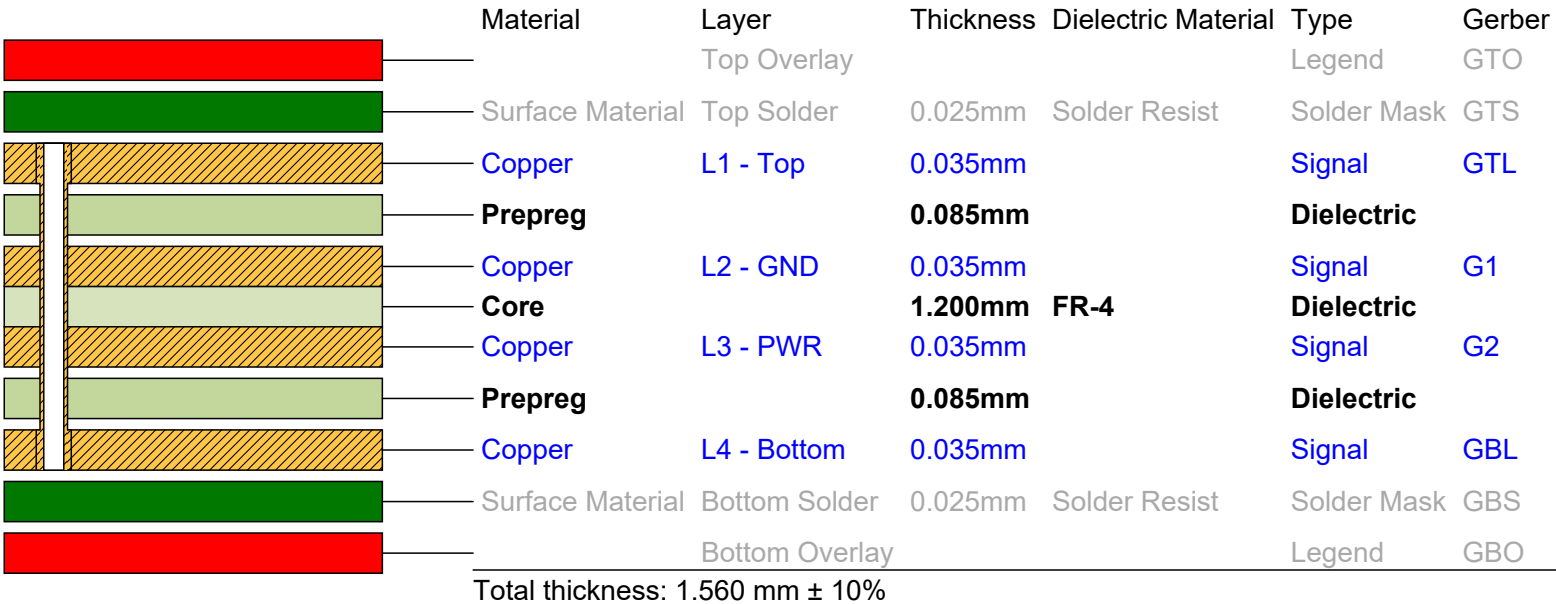


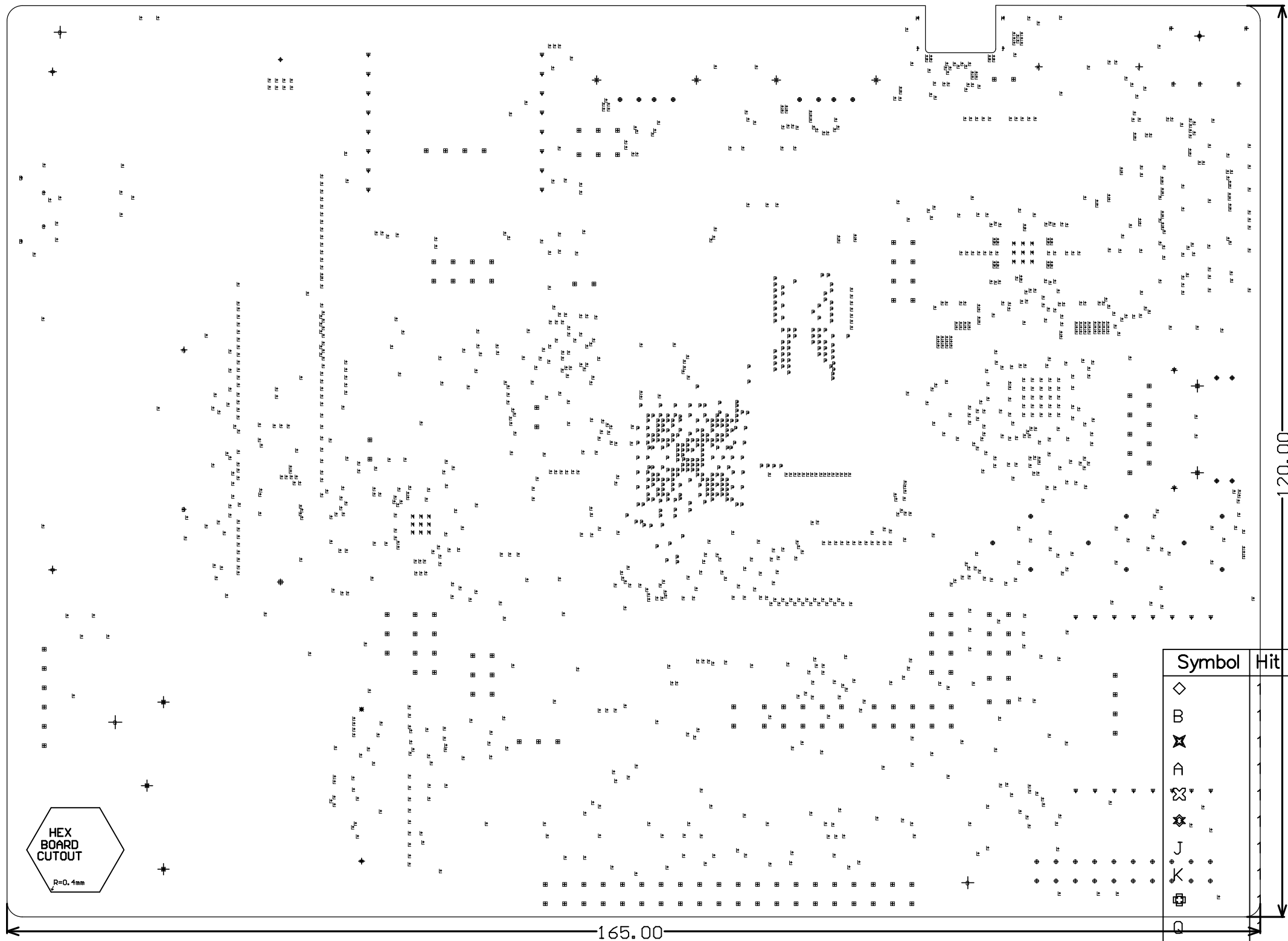
04-12169 Layer Stack Legend



Total thickness: 1.560 mm ± 10%

PCB Impedance Information

TYPE	IMPEDANCE	TOLERANCE	LAYER	REFERENCE	WIDTH [um]	GAP [um]
DIFF	90Ω	± 10%	L1	L2	125	200
DIFF	90Ω	± 10%	L4	L3	125	200
DIFF	100Ω	± 10%	L1	L2	100	200
DIFF	100Ω	± 10%	L4	L3	100	200
SE	50Ω	± 10%	L1	L2	125	
SE	50Ω	± 10%	L4	L3	125	



THIS BOARD CONTAINS CONTROLLED IMPEDANCE TRACKS, TRACK AND GAP SIZES ARE AS FOLLOWS:

TYPE;	Impedance;	Tolerance;	Layer;	Reference;	Width (um);	Gap (um);
DIFF;	90ohm;	+/- 10%;	L1;	L2;	125;	175;
DIFF;	90ohm;	+/- 10%;	L4;	L3;	125;	175;
DIFF;	100ohm;	+/- 10%;	L1;	L2;	100;	200;
DIFF;	100ohm;	+/- 10%;	L4;	L3;	100;	200;
SE;	50ohm;	+/- 10%;	L1;	L2;	125;	
SE;	50ohm;	+/- 10%;	L4;	L3;	125;	

Layer	Name	Material	Thickness	Constant	Gerber
	Top Overlay				GTO
	Top Solder	Solder Resist	0.025mm	3.8	GTS
1	L1 – Top		0.035mm		GTL
	Dielectric 1		0.085mm	4.2	
2	L2 – GND		0.035mm		G1
	Dielectric 2	FR-4	1.200mm	4.2	
3	L3 – PWR		0.035mm		G2
	Dielectric 3		0.085mm	4.2	
4	L4 – Bottom		0.035mm		GBL
	Bottom Solder	Solder Resist	0.025mm	3.8	GBS
	Bottom Overlay				GBO

Total board thickness: 1.560mm

Symbol	Hit	Count	Finished Hole Size	Hole Tolerance	Plated	Hole Type
◇	1		1.10mm	+/-0.08mm	NPTH	Round
B	1		1.10mm	+/-0.05mm	NPTH	Round
✕	1		1.10mm		NPTH	Round
A	1		1.60mm	+/-0.05mm	NPTH	Round
✕	1		1.60mm	+/-0.08mm	NPTH	Round
✕	1		1.60mm		NPTH	Round
J	1		1.85mm	+/-0.08mm	PTH	Round
K	1		1.85mm		PTH	Round
✕	1		2.60mm		NPTH	Round
Q	1		3.50mm		PTH	Round
D	2		0.60mm		PTH	Slot
I	2		0.60mm		PTH	Slot
H	2		0.60mm		PTH	Slot
C	2		0.65mm		PTH	Slot
F	2		1.00mm		PTH	Slot
▽	2		1.60mm		PTH	Round
☆	2		2.05mm		PTH	Round
O	2		3.20mm		PTH	Round
▣	2		3.25mm	+/-0.05mm	NPTH	Round
E	3		1.00mm		PTH	Slot
✕	3		3.00mm		NPTH	Round
◎	4		1.20mm		PTH	Round
✕	4		2.30mm		PTH	Round
N	9		0.25mm		PTH	Round
M	9		0.30mm		PTH	Round
✕	17		1.00mm		PTH	Round
O	20		1.07mm		PTH	Round
▽	32		0.89mm		PTH	Round
□	154		0.90mm		PTH	Round
P	302		0.15mm		PTH	Round
L	1233		0.20mm		PTH	Round
	1818	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 Routed Path Length

THIS PCB TO BE MANUFACTURED TO MEET ALL ACCEPTANCE LEVELS FROM CLASS 2:

STANDARD: ☒ IPC-A-600 ☒ IPC-6012 ☐ IPC-6013

MATERIAL: FR-4 or Equivalent ☒ TG 130-140 ☐ TG 170-180

☒ MULTILAYER ☐ 4 LAYERS ☒ CONTROLLED IMPEDANCE

☒ TH VIA ☐ BLIND VIA ☐ BURIED VIA

Cu WEIGHT EXTERNAL LAYERS 35um FINISHED

Cu WEIGHT INTERNAL LAYERS 35um FINISHED

FINISHED OVERALL THICKNESS 1.6 mm ± 10 %

PCB OUTLINE WIDTH 165 mm \pm 0.1 mm


PCB OUTLINE HEIGHT 120 mm ± 0.1 mm

COPPER THIEVING ALLOWED ☐ YES ☒ NO

FINISH: ☒ ENIG

IMMERSION SILVER

IMMERSION TIN

 SMOBC WITH SELECTIVE GOLD PLATING ON LANDS INDICATED. 1um GOLD OVER 5-10 um NICKEL

SOLDERMASK	IPC-SM-840 Class T
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SOLDERMASK COLOR	RED HIGH GLOSS
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SILKSCREEN COLOR WHITE

ALL HOLES TO BE LOCATED BY THE COORDINATES FROM THE NC DRILL DATA PROVIDED

USE ARTWORK SET NO. 04-12169 PCB REV 4

ALL UL LOGO, MANUFACTURER'S ID, AND DATE CODES SHALL BE PLACED ON THE BOTTOM SIDE UNLESS OTHERWISE INDICATED.

ANY ALTERNATIVES TO THE ABOVE SPECIFICATIONS MUST FIRST BE APPROVED.



TITLE:		PART NUMBER: 04-12169	
<h1>SAMA7D65 Curiosity</h1>			
PCB DESIGNER: CAv		GERBER FILE: Fab Drawing (Bottom,Top Layer)	
ENGINEER: CAv		BOARD NUMBER: 04-12169	DOCUMENT NUMBER: 04-12169_FAB-D DATE: 9/12/2024
PCB FILE NAME: SAMA7D65-Curiosity.PcbDoc		LAYER NAME: FAB (M4)	NOTES (M1) REV: 4