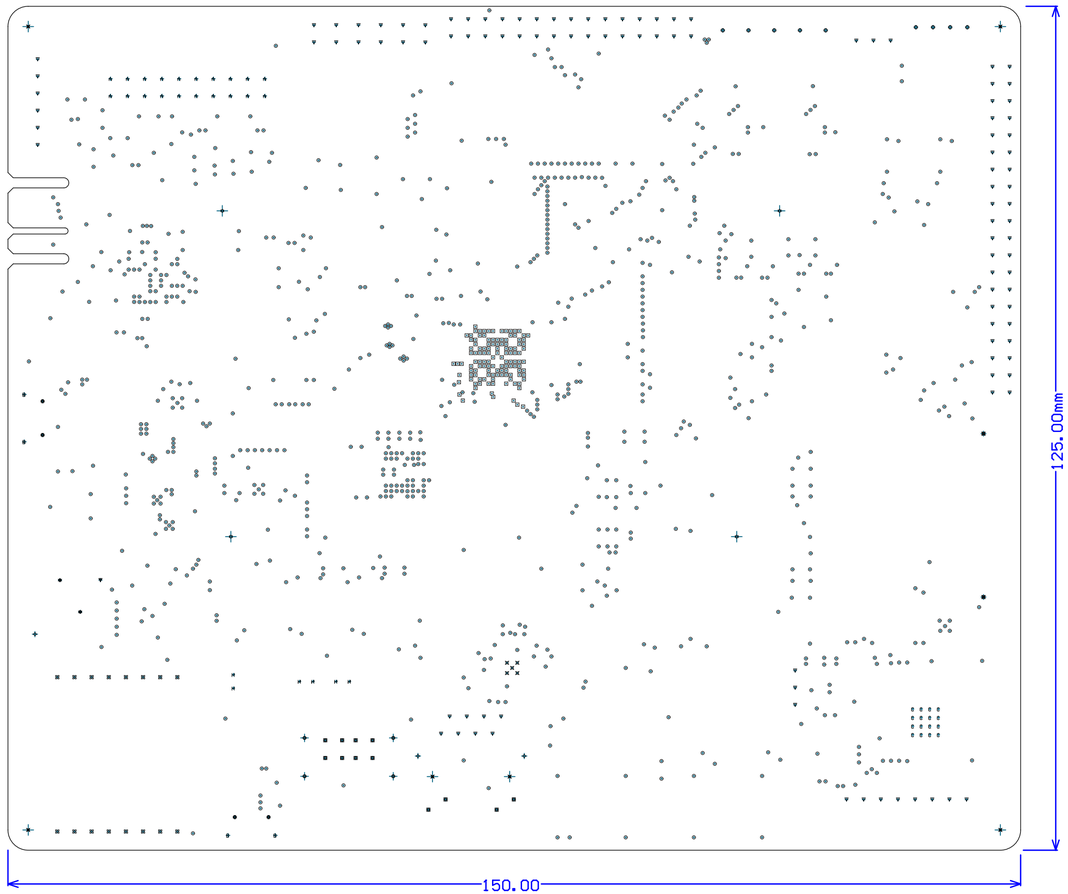
REV	ECO	Comments	Date



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

STANDARD: [X] IPC-A-600 [X] IPC-6012 [ ] IPC-6013

MATERIAL: FR-4 or Equivalent [X] TG 130-140 [ ] TG 170-180

[X] MULTILAYER [4] LAYERS [X] CONTROLLED IMPEDANCE

[X] 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 150 mm ± 0.1 mm

PCB OUTLINE HEIGHT 125 mm ± 0.1 mm

COPPER THIEVING ALLOWED [ ] YES [X] NO

FINISH:

[X] 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

SOLDERMASK COLOR: GREEN HIGH GLOSS

SILKSCREEN COLOR: WHITE

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

USE ARTWORK SET NO. DT100126 PCB REV 3

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.

Symbol	Hit Count	Finished Hole Size	Hole Tolerance	Plated	Hole Type	Hole Length	Routed Path Length
▽	1	1.00mm		PTH	Slot	3.50mm	2.50mm
✲	2	1.00mm		PTH	Slot	3.00mm	2.00mm
⊠	2	1.50mm	+/-0.05mm	NPTH	Round	–	–
◇	3	1.60mm		PTH	Round	–	–
⊕	4	0.85mm		PTH	Round	–	–
B	4	1.15mm		PTH	Round	–	–
◎	4	2.30mm		PTH	Round	–	–
✲	4	3.20mm	+/-0.05mm	NPTH	Round	–	–
⌑	5	0.30mm		PTH	Round	–	–
H	6	0.75mm		PTH	Round	–	–
⌘	6	3.20mm		NPTH	Round	–	–
⌬	9	1.10mm		PTH	Round	–	–
⊡	12	1.00mm		PTH	Round	–	–
C	16	0.30mm		PTH	Round	–	–
⊠	16	0.89mm		PTH	Round	–	–
A	20	1.07mm		PTH	Round	–	–
▽	110	0.90mm		PTH	Round	–	–
□	121	0.15mm		PTH	Round	–	–
○	896	0.20mm		PTH	Round	–	–
	1241 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

Layer	Name	Material	Thickness	Constant	Board Layer Stack
	Top Overlay				
	Top Solder	Solder Resist	0.020mm	3.5	
1	L1 – Top Layer	Copper	0.035mm		
	Dielectric 1		0.090mm	4.2	
2	L2 – GND	Copper	0.035mm		
	Dielectric 2	FR-4	1.200mm	4.2	
3	L3 – PWR	Copper	0.035mm		
	Dielectric 3		0.090mm	4.2	
4	L4 – Bottom Layer	Copper	0.035mm		
	Bottom Solder	Solder Resist	0.020mm	3.5	
	Bottom Overlay				

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;	200;
DIFF;	90ohm;	+/- 10%;	L4;	L3;	125;	200;
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;	

MICROCHIP
Microchip Technology Inc.
2355 W. Chandler Blvd.
Chandler, AZ 85224

TITLE: SAM9X60 Evaluation Kit

PART NUMBER: DT100126

PCB DESIGNER: IGn	GERBER FILE: Fab Drawing (Bottom,Top Layer)		
ENGINEER: IGn	BOARD NUMBER: 04-11039	DOCUMENT NUMBER: 04-11039 -D	DATE: 11/8/2019
PCB FILE NAME: SAM9X60-EK.PcbDoc	LAYER NAME: FAB (M4) NOTES (M1)	REV: 3	10mm 400mil