ESP32_CPA_cartridge
(2.0)

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| Project	ESP32_CPA_cartridge
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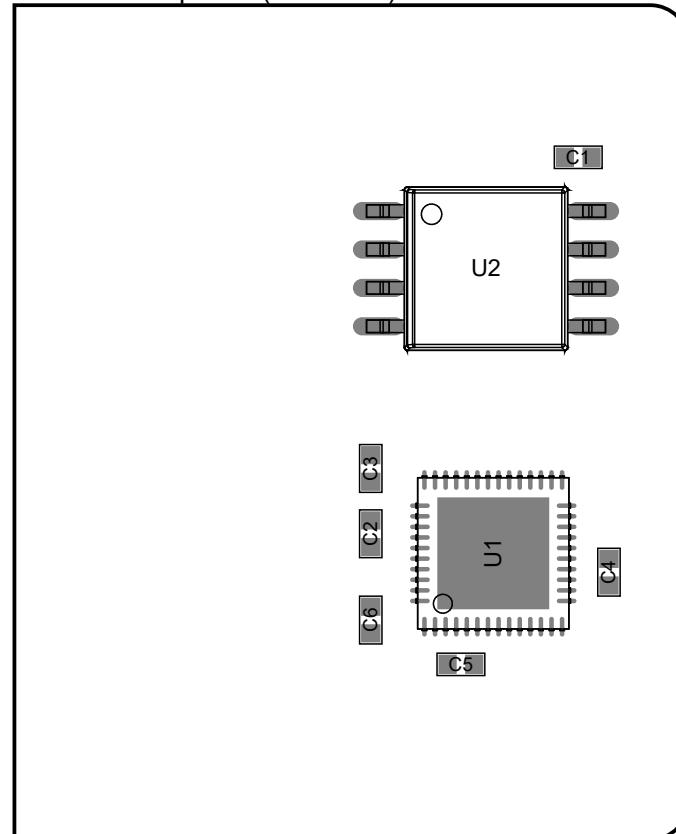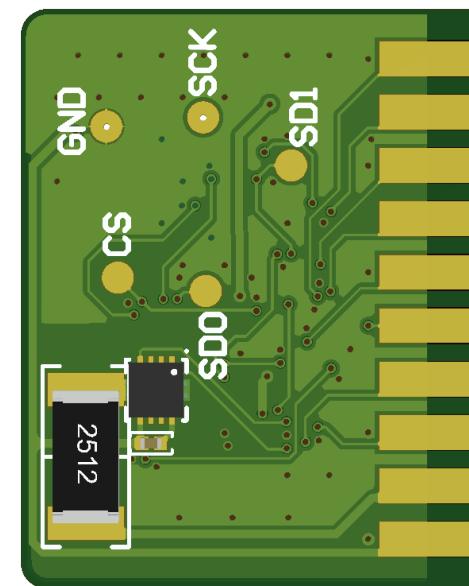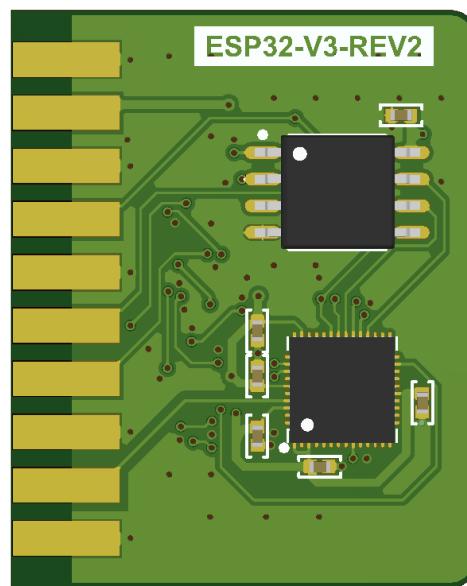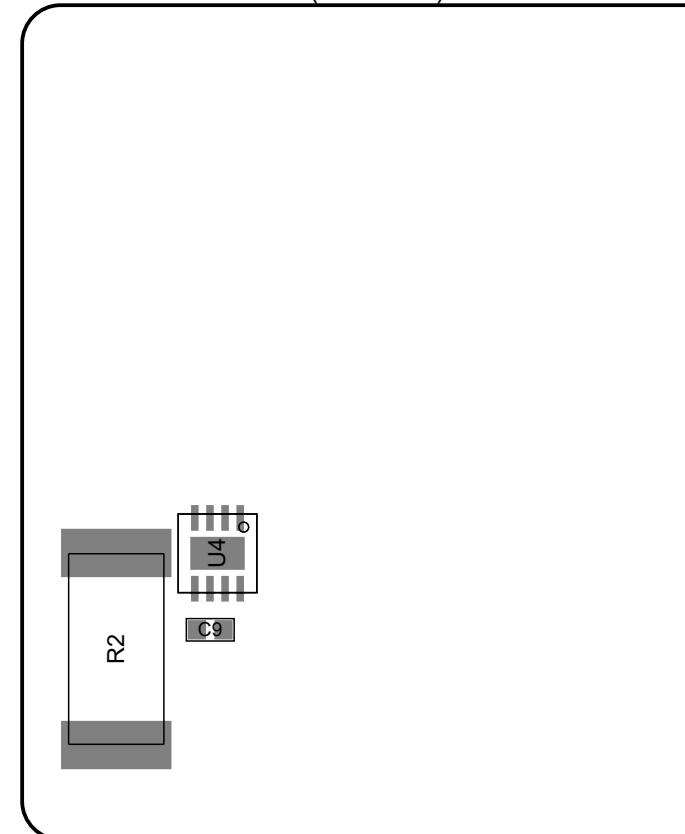
View from Top side (Scale 4:1)

View from Bottom side (Scale 4:1)

C1

U2

C3

C2

U1

C4

C6

C5

U4

C9

R2

ESP32-V3-REV2

GND

SCK

SD1

CS

SDO

2512

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Bill Of Materials

Line #	Designator	Quantity	Footprint	Tolerance	Value	Manufacturer	Material	Part Name
1	C1, C9	2	C0402	±10%	100nF	Samsung Electro-Mechanics	X7R	C1525
2	R2	1	R2512	5%	30	FOJAN		FRC2512J300 TS
3	U1	1	QFN-48-5x5mm			Espressif		ESP32-D0WD-V3
4	U2	1	SOIC127P790X216-8N			Winbond		W25Q32JVSSIQS
5	U4	1	SON50P250X100_HS-9N			Sensirion		STS35-DIS

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Layer Stack Legend

Material	Layer	Thickness	Dielectric Material	Type	Gerber
	Top Overlay			Legend	GTO
Surface Material	Top Solder	0.020mm	Solder Resist	Solder Mask	GTS
Copper	**Top Layer**	**0.035mm**		**Signal**	**GTL**
Prepreg		*0.099mm*	*PP-006*	*Dielectric*	
CF-004	**Layer 1**	**0.015mm**		**Internal Plane**	**GP1**
		1.265mm	*FR-4*	*Dielectric*	
CF-004	**Layer 2**	**0.015mm**		**Internal Plane**	**GP2**
Prepreg		*0.099mm*	*PP-006*	*Dielectric*	
Copper	**Bottom Layer**	**0.035mm**		**Signal**	**GBL**
Surface Material	Bottom Solder	0.020mm	Solder Resist	Solder Mask	GBS
	Bottom Overlay			Legend	GBO

Total thickness: 1.604mm

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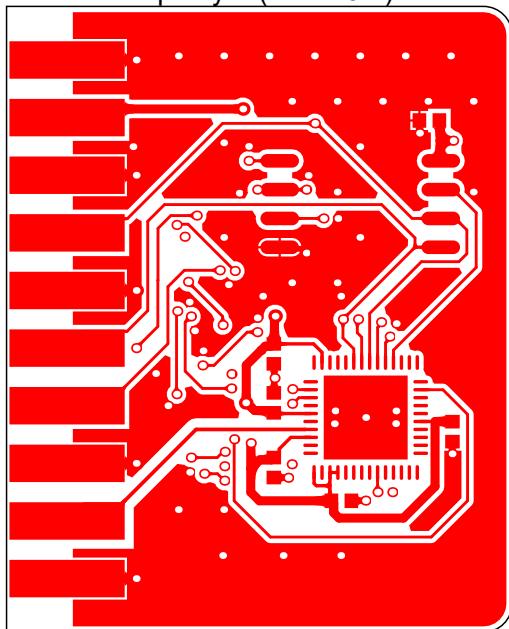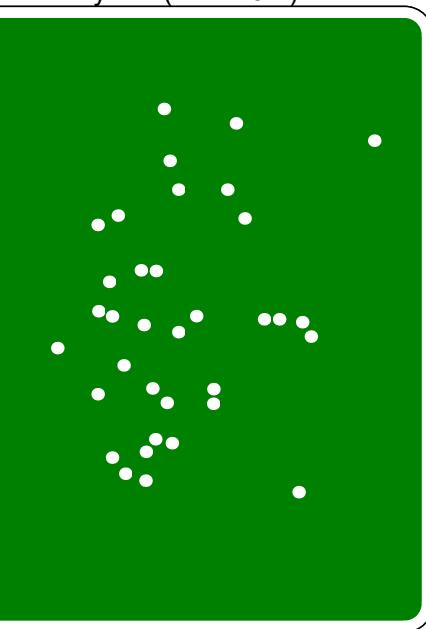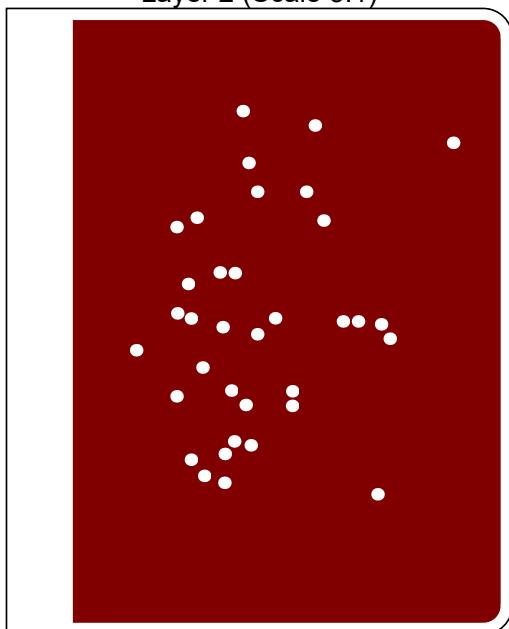
Top Layer (Scale 3:1)
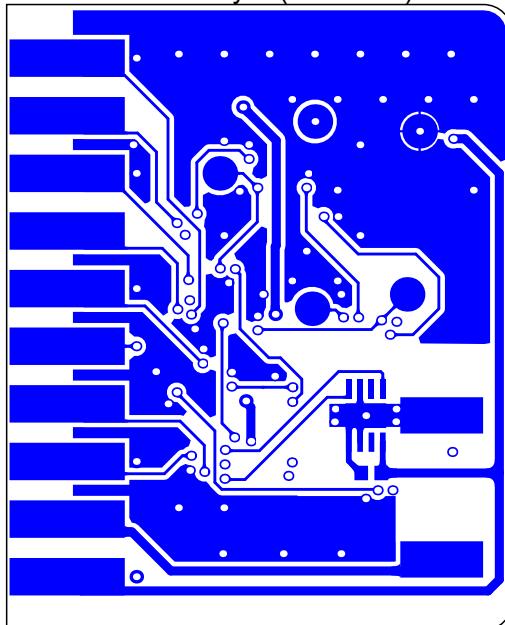
Layer 1 (Scale 3:1)

Layer 2 (Scale 3:1)

Bottom Layer (Scale 3:1)

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