



# Bill of Materials

TI DESIGNS

TIDA-00133: Uncompressed digital video SerDes over Coax for Automotive Mega Pixel CMOS C  
DS90UB914A-CXEVM

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
0-NO-STUFF	R81	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R80	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R84	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R82	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R79	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
	R40	1	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.0 ohm, 0.1W, 0402, Digikey P0.0JCT-ND			
	R33	1	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.0 ohm, 0.1W, 0402, Digikey P0.0JCT-ND			critical 1%
	R32	1	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.0 ohm, 0.1W, 0402, Digikey P0.0JCT-ND			critical 1%

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
0-NO-STUFF	R85	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R75	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R78	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R76	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R72	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R73	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R71	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R77	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R70	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R86	0	402	SMT R, +-1%	Panasonic ERJ-2GE0R00X, 0.1W, DigiKey P0.0JCT-ND		No-Stuff	
0-NO-STUFF	R36	0	603	SMD R, +-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND		No-Stuff	
0-NO-STUFF	R38	0	603	SMD R, +-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
0-NO-STUFF	R37	0	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND		No-Stuff	
	R68	1	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND			
	R69	1	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND			
0_No Stuff	R58	0	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND		No-Stuff	
	R42	1	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND			
	R41	1	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND			
0-NO-STUFF	R55	0	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND		No-Stuff	
0-NO-STUFF	R57	0	603	SMD R, +/-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND		No-Stuff	
0.1UF	C42	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C40	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
0.1UF	C48	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C36	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C26	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C38	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C9	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C35	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C8	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C37	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C44	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C23	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
0.1UF	C58	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C21	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C27	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C29	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C46	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C50	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C25	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C53	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C60	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C56	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
0.1UF	C2	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C13	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C6	1	603	Chip cap, X7R, 0603	Murata GRM188R72A104KA35 D, 0.1UF, +-10%, 100V, X7R, DigiKey# 490-3285-1-ND			0.1uF, X7R, recommend 50V - ac coupling
0.1UF	C4	1	603	Chip cap, X7R, 0603	Murata GRM188R72A104KA35 D, 0.1UF, +-10%, 100V, X7R, DigiKey# 490-3285-1-ND			
0.1UF	C5	1	603	Chip cap, X7R, 0603	Murata GRM188R72A104KA35 D, 0.1UF, +-10%, 100V, X7R, DigiKey# 490-3285-1-ND			
0.1UF	C16	1	603	Chip cap, X7R, 0603	Murata GRM188R72A104KA35 D, 0.1UF, +-10%, 100V, X7R, DigiKey# 490-3285-1-ND			
0.1UF	C15	1	603	Chip cap, X7R, 0603	Murata GRM188R72A104KA35 D, 0.1UF, +-10%, 100V, X7R, DigiKey# 490-3285-1-ND			
0.047UF	C7	1	603	Chip cap, X7R, 0603	Murata GRM188R71H473KA61 D, 0.047UF, +-10%, 50V, X7R, DigiKey# 490-3287-1-ND			0.047uF, X7R, recommend 50V - ac coupling for termination of unused output

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
1K@100MHz	L3	1	603	SMT FB	Murata, Ferrite Bead, 1K @100MHz, BLM18AG102SN1D, 0603, DigiKey# 490-1015-1-ND			
1K@100MHz	L8	1	603	SMT FB	Murata, Ferrite Bead, 1K @100MHz, BLM18AG102SN1D, 0603, DigiKey# 490-1015-1-ND			critical for noise isolation, recommended p/n (or equivalent)
1UF	C51	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490-5307-1-ND			
1UF	C54	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490-5307-1-ND			
1UF	C47	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490-5307-1-ND			
1UF	C61	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490-5307-1-ND			
1UF	C49	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490-5307-1-ND			
1UF	C45	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490-5307-1-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
1UF	C57	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490- 5307-1-ND			
1UF	C59	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490- 5307-1-ND			
1UF	C43	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490- 5307-1-ND			
1UF	C39	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490- 5307-1-ND			
1UF	C41	1	603	Chip cap, X7R, 0603	Murata, GRM188R71E105KA12 x, 1UF, 10%, 25V, -55 to 125C, DigiKey# 490- 5307-1-ND			
2.2UH	L7	1	LPS3015-222ML	SMT inductor	CoilCraft, LPS3015- 222ML, 2.2UH+-10%			
5.6UH	L9	1		SMT inductor	CoilCraft, 1008PS- 562KL, 5.6UH+-10%			use recommended part, critical impedance vs. frequency and saturation current. Reference app note on power over coax.
10UH-NO-STUFF	L5	0		SMT inductor	CoilCraft, 1008PS- 103KL, 10UH+-10%		No-Stuff	
10UH-NO-STUFF	L6	0		SMT inductor	CoilCraft, 1008PS- 103KL, 10UH+-10%		No-Stuff	

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
4.7K	R43	1	402	SMT R, +-1%	Panasonic ERJ-2RKF4701X, 1%, 100ppm, 0.1W, DigiKey P4.70KLCT-ND			
4.7K	R35	1	402	SMT R, +-1%	Panasonic ERJ-2RKF4701X, 1%, 100ppm, 0.1W, DigiKey P4.70KLCT-ND			
4.7UF	C3	1	805	Chip cap, X7R, 0805	Murata GRM21BR71C475KA73 L, 4.7UF, 16V, X7R, 0805, 10%, DigiKey# 490-4522-1-ND			
4.7UF	C14	1	805	Chip cap, X7R, 0805	Murata GRM21BR71C475KA73 L, 4.7UF, 16V, X7R, 0805, 10%, DigiKey# 490-4522-1-ND			
4.7UF	C24	1	805	Chip cap, X7R, 0805	Murata GRM21BR71C475KA73 L, 4.7UF, 16V, X7R, 0805, 10%, DigiKey# 490-4522-1-ND			
4.7UF	C22	1	805	Chip cap, X7R, 0805	Murata GRM21BR71C475KA73 L, 4.7UF, 16V, X7R, 0805, 10%, DigiKey# 490-4522-1-ND			
10UF	C18	1	805	Chip cap, X7R, 0805	Murata GRM21BR71A106KE51 L, 10UF, 10%, 10V, X7R, 0805, DigiKey# 490-3905-1-ND			
4.53K	R61	1	603	SMT R, +-1%	Panasonic ERJ-3EKF4531V, 1%, 100ppm, 0.1W, DigiKey P4.53KHCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
4 HEADER	JP5	1		4 Pin Header	Molex, 1x4 header pin, 0.1" pitch, DigiKey# WM2702-ND			
5PF-NO-STUFF	C1	0	402	Chip cap, X7R, 0402	Murata GRM1555C1H5R0CZ01 D, 5pF+-0.25pF, 50V, NPO, DigiKey# 490-1274-1-ND		No-Stuff	
5PF-NO-STUFF	C11	0	402	Chip cap, X7R, 0402	Murata GRM1555C1H5R0CZ01 D, 5pF+-0.25pF, 50V, NPO, DigiKey# 490-1274-1-ND		No-Stuff	
11K	R45	1	805	SMT R, +-1%, 0805	Panasonic ERJ-6ENF1102V, 11K, 1%, 0.125W, DigiKey# P11.0KCCT-ND			critical 1%
3K	R46	1	805	SMT R, +-1%, 0805	Panasonic ERJ-6ENF3001V, 3K, 1%, 0.125W, DigiKey# P3.0KCCT-ND			critical 1%
10K	R25	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ-2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R2	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ-2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R19	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ-2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R3	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ-2GEJ103X, 0402, Digikey P10KJCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
10K	R65	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R27	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R26	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R20	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R1	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R24	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R15	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R14	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R16	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R5	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
10K	R17	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R13	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R34	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			critical 1%
10K	R6	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R7	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R9	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R8	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R23	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R18	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R22	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
10K	R21	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R31	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			critical 1%
10K	R12	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R39	1	805	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 6GEYJ103V, 0805, Digikey P10KACT-ND			critical 1%
10K	R30	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R4	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R10	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R11	1	402	SMT R, +-1%	10K+-5%, +-200ppm/C, Panasonic, ERJ- 2GEJ103X, 0402, Digikey P10KJCT-ND			
10K	R51	1	603	SMT R, +-1%	Panasonic ERJ- 3EKF1002V, 1%, 0.1W, 100ppm, Digikey P10.0KHCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
10K	R62	1	603	SMT R, +/-1%	Panasonic ERJ-3EKF1002V, 1%, 0.1W, 100ppm, Digikey P10.0KHCT-ND			
10K	R54	1	603	SMT R, +/-1%	Panasonic ERJ-3EKF1002V, 1%, 0.1W, 100ppm, Digikey P10.0KHCT-ND			
10K	R60	1	603	SMT R, +/-1%	Panasonic ERJ-3EKF1002V, 1%, 0.1W, 100ppm, Digikey P10.0KHCT-ND			
10K	R56	1	603	SMT R, +/-1%	Panasonic ERJ-3EKF1002V, 1%, 0.1W, 100ppm, Digikey P10.0KHCT-ND			
10PF-NO-STUFF	C20	0	402	Chip cap, X7R, 0402	Murata GRM1555C1H100JZ01 D, 10pF, 5%, COG, 50V, DigiKey# 490-1278-1-ND		No-Stuff	
10PF-NO-STUFF	C19	0	402	Chip cap, X7R, 0402	Murata GRM1555C1H100JZ01 D, 10pF, 5%, COG, 50V, DigiKey# 490-1278-1-ND		No-Stuff	
10UF	C33	1	805	Chip cap, X7R, 0805	Murata GRM21BR71A106KE51 L, 10uF, 10%, 10V, X7R, 0805, DigiKey# 490-3905-1-ND			
10UF	C28	1	805	Chip cap, X7R, 0805	Murata GRM21BR71A106KE51 L, 10uF, 10%, 10V, X7R, 0805, DigiKey# 490-3905-1-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
10UF	C30	1	805	Chip cap, X7R, 0805	Murata GRM21BR71A106KE51 L, 10UF, 10%, 10V, X7R, 0805, DigiKey# 490-3905-1-ND			
10UF	C10	1	805	Chip cap, X7R, 0805	Murata GRM21BR71A106KE51 L, 10UF, 10%, 10V, X7R, 0805, DigiKey# 490-3905-1-ND			
10UF	C12	1	805	Chip cap, X7R, 0805	Murata GRM21BR61C106KE15 L, 10UF, 10%, 16V, X5R, 0805, DigiKey# 490-3886-1-ND			
16.5K	R59	1	603	SMT R, +-1%	Panasonic ERJ- 3EKF1652V, 1%, 100ppm, 0.1W, DigiKey P16.5KHCT-ND			
22UF	C52	1	1210	Chip cap, X7R	Murata GCM32ER71C226KE19 L, 22UF, 10%, 16V, X7R, 1210, DigiKey# 490-5242-1-ND			
22UF	C55	1	1210	Chip cap, X7R	Murata GCM32ER71C226KE19 L, 22UF, 10%, 16V, X7R, 1210, DigiKey# 490-5242-1-ND			
22UF	C17	1	1210	Chip cap, X7R	Murata GCM32ER71C226KE19 L, 22UF, 10%, 16V, X7R, 1210, DigiKey# 490-5242-1-ND			
49.9	R48	1	402	SMT R, +-1%	Panasonic ERJ- 2RKF49R9X, 1%, 100ppm, 0.1W, DigiKey P49.9LCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
49.9	R49	1	402	SMT R, +-1%	Panasonic ERJ-2RKF49R9X, 1%, 100ppm, 0.1W, DigiKey P49.9LCT-ND			
100	R52	1	402	SMT R, +-1%	Panasonic ERJ-2RKF1000X, 100 ohm, 1%, 0.1W, Digikey# P100LCT-ND			
100	R53	1	402	SMT R, +-1%	Panasonic ERJ-2RKF1000X, 100 ohm, 1%, 0.1W, Digikey# P100LCT-ND			
	R47	1	805	SMT R, +-1%, 0805	PanasonicERJ-6GEY0R00V,0ohm,0805,DigiKey# P0.0ACT-ND			critical 1%
100UH	L2	1		SMT inductor	CoilCraft, MSS7341T-104ML, 100UH+-20%			use recommended part, critical impedance vs. frequency and saturation current. Reference app note on power over coax.
330	R29	1	402	SMT R, +-1%, 0402	Panasonic ERJ-2RKF3300X, 330 ohm, 1%, 0.1W, 0402, DigiKey# P330LCT-ND			
330	R28	1	402	SMT R, +-1%, 0402	Panasonic ERJ-2RKF3300X, 330 ohm, 1%, 0.1W, 0402, DigiKey# P330LCT-ND			
330	R66	1	402	SMT R, +-1%, 0402	Panasonic ERJ-2RKF3300X, 330 ohm, 1%, 0.1W, 0402, DigiKey# P330LCT-ND			
330	R67	1	402	SMT R, +-1%, 0402	Panasonic ERJ-2RKF3300X, 330 ohm, 1%, 0.1W, 0402, DigiKey# P330LCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
330	R50	1	402	SMT R, +/-1%, 0402	Panasonic ERJ-2RKF3300X, 330 ohm, 1%, 0.1W, 0402, DigiKey# P330LCT-ND			
COILCRAFT_KA4909-NO-STUFF	L1	0		COILCRAFT DIFF CHOKE KA4909-AL	Coilcraft differential choke KA4909-AL		No-Stuff	
DLW21SN261XQ2 - NO-STUFF	L4	0	Murata_DLW21	Murata common mode choke	Murata DLW21SN261XQ2 cm choke		No-Stuff	
DS90UB914ATRHSTQ1	U1	1	LLP48	DS90UR914AQ DESERIALIZER	*	consign		
ESD-NO-STUFF	U2	0	SOT-533	TI TPD2E001Q1 2-CH ESD	Digikey# 296-21883-1-ND		No-Stuff	
FAKRA_SMT_ROSENBERGER	J5	1		FAKRA connector, SMT	Rosenberger FAKRA SMT connector, 59S20X-40ML5-Y			
HEADER 2X2	JP2	1		2x2 header, male	Use CUT and FIT from JP1			
HEADER 3	JP6	1		1x3 header, male	Amp/Tyco, 0.1 pitch, 3-pin header, 87224-3, DigiKey# A26545-ND			
HEADER 3	JP4	1		1x3 header, male	Amp/Tyco, 0.1 pitch, 3-pin header, 87224-3, DigiKey# A26545-ND			
HEADER 3	JP3	1		1x3 header, male	Amp/Tyco, 0.1 pitch, 3-pin header, 87224-3, DigiKey# A26545-ND			
HEADER 16X2-NO-STUFF	JP7	0		2x16 header-MALE	CONN HEADER VERT DUAL 40POS GOLD, DigiKey# 3M9465-ND		No-Stuff	
HEADER 15X2	JP1	1		2x15 header, male	CONN HEADER VERT DUAL 40POS GOLD, DigiKey# 3M9465-ND			
LED-RED	D4	1	603	LED	Lite On Inc, 0603, Red LED, LTST-C191KRKT, DigiKey# 160-1447-1-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
LED-RED	D3	1	603	LED	Lite On Inc, 0603, Red LED, LTST-C191KRKT, DigiKey# 160-1447-1-ND			
LED-green	D1	1	603	LED	Lite On Inc, 0603, Red-Orange LED, LTST-C191GKT, DigiKey# 160-1443-1-ND			
LED-orange	D2	1	603	LED	Lite On Inc, 0603, Red-Orange LED, LTST-C191KFKT, DigiKey# 160-1445-1-ND			
LED-red orange	D5	1	603	LED	Lite On Inc, 0603, Red Orange LED, LTST-C191KAKT, DigiKey# 160-1444-1-ND			
LM3671MF-1.8/NOPB	U5	1	SOT-23-5	SOT-23-5 Step-Down DC-DC Converter	LM3671MF-1.8/NOPB, DC-DC Down converter, DigiKey# LM3671MF-1.8/NOPBTR-ND			
LP38693MP-ADJ	U3	1	SOT-223	LP38693MPADJ: 0.5A LDO REGULATOR, NSC	LP38693MP-ADJ, LDO, SOT223-5, DigiKey#LP38693MP-ADJCT-ND			
LP38693MP-ADJ	U4	1	SOT-223	LP38693MPADJ: 0.5A LDO REGULATOR, NSC	LP38693MP-ADJ, LDO, SOT223-5, DigiKey#LP38693MP-ADJCT-ND			
NC7SP04P5X	U6	1	SC70-5	NC7SP04P5X INVERTER	Fairchild Semi, Inverter, NZ7SP04P5X, DigiKey# NC7SP04P5XCT-ND			
NC7SP04P5X	U8	1	SC70-5	NC7SP04P5X INVERTER	Fairchild Semi, Inverter, NZ7SP04P5X, DigiKey# NC7SP04P5XCT-ND			
NC7SZ175P6X	U7	1	SC70-6	NC7SZ175P6X LATCH	Fairchild Semi, latch, NC7SZ175P6X, DigiKey# NC7SZ175P6XCT-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
NC7SZ175P6X	U9	1	SC70-6	NC7SZ175P6X LATCH	Fairchild Semi, latch, NC7SZ175P6X, DigiKey# NC7SZ175P6XCT-ND			
ROSENBERGER_HSD_CON_NO-STUFF	P1	0	ROSENBERGER_HSD_CON	Rosenberger HSD connector, D4S20D-40ML5-Y	Rosenberger HSD connector, D4S20D-40ML5-Y		No-Stuff	
SMA-bulkhead-NO-STUFF	J2	0	sma-edge-round	SMA, PCB MOUNT	Johnson end launch, bulkhead, round contact, 142-0701-871, digikey# J610-ND		No-Stuff	
SMA-bulkhead-NO-STUFF	J1	0	sma-edge-round	SMA, PCB MOUNT	Johnson end launch, bulkhead, round contact, 142-0701-871, digikey# J610-ND		No-Stuff	
SMA-bulkhead-NO-STUFF	J3	0	sma-edge-round	SMA, PCB MOUNT	Johnson end launch, bulkhead, round contact, 142-0701-871, digikey# J610-ND		No-Stuff	
SMA-bulkhead-NO-STUFF	J4	0	sma-edge-round	SMA, PCB MOUNT	Johnson end launch, bulkhead, round contact, 142-0701-871, digikey# J610-ND		No-Stuff	
SW-PB	S3	1			Panasonic EVQ-PNF04M push switch, DigiKey# P13597SCT-ND			
SW DIP-3	S2	1		DIP Switch	Grayhill Inc, 78B03ST, SWITCH DIP EXTENDED SEALED 3POS, DigiKey# GH7182-ND			
SW DIP-8	S1	1		DIP Switch	Grayhill Inc, 78B07ST, SWITCH DIP EXTENDED SEALED 7POS, DigiKey# GH7190-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
Light Pipe		0			5-position light pipe, Lumex Opto LPF-C051303S, DigiKey# 67-1856-ND		No-Stuff	
Header 2x4	JP8	1		2x4 header, male	Use CUT-n-FIT remaining from JP1			
Header 1x4	JP9	1		1x4 header, male	Molex, 1x4 header pin, 0.1" pitch, DigiKey# WM2702-ND			
49.9	R74	1	603	SMD R, +/-1%, 0603	Panasonic ERJ-3EKF49R9V, 49.9ohm, 1%, 0603, DigiKey# P49.9HCT-ND			49.9 Ohm required for termination of unused output
1K	R83	1	603	SMD R, +/-1%, 0603	Panasonic ERJ-3EKF1001V, 1Kohm, 1%, 0603, DigiKey# P1.00KHCT-ND			
1K	R87	1	603	SMD R, +/-1%, 0603	Panasonic ERJ-3EKF1001V, 1Kohm, 1%, 0603, DigiKey# P1.00KHCT-ND			
10UF	C62	1	805	Chip cap, X7R, 0805	Murata GRM21BR71A106KE51 L, 10UF, 10%, 10V, X7R, 0805, DigiKey# 490-3905-1-ND			
RAPC722X	JP11	1	RAPC722X	Power jack	Switchcraft,RAPC722X, CONNN POWERJACK MINI.08" RA PCMT,Digikey# SC1313-ND			
MBRS1540T3	D6	1	MBRS1540T3	Diode	On Semi,MBRS1540T3G,DI ODE SCHOTTKY 1.5A 40V SMB,Digikey# MBRS1540T3GOSTR-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
MBRS1540T3	D7	1	MBRS1540T3	Diode	On Semi, MBRS1540T3G, DI ODE SCHOTTKY 1.5A 40V SMB, Digikey# MBRS1540T3GOSTR-ND			
4.7UF_50V	C63	1	1206	Chip cap, X7R, 1206	TDK,C3216X7R1H475M 160AC,CAP CER 4.7UF 50V 20% X7R 1206,Digikey# 445-8033-2-ND			
22UF	C64	1	1206	Chip cap, X5R, 1206	TDK,C3216X5R1E226M 160AB,CAP CER 22UF 25V 20% X5R 1206,Digikey# 445-6000-2-ND			
22UF	C65	1	1206	Chip cap, X5R, 1206	TDK,C3216X5R1E226M 160AB,CAP CER 22UF 25V 20% X5R 1206,Digikey# 445-6000-2-ND			
22UF	C70	1	1206	Chip cap, X5R, 1206	TDK,C3216X5R1E226M 160AB,CAP CER 22UF 25V 20% X5R 1206,Digikey# 445-6000-2-ND			
0.1UF_50V	C77	1	603	Chip cap, X7R, 0603	TDK,C1608X7R1H104K 080AA,CAP CER 0.1UF 50V 10% X7R 0603,Digikey# 445-1314-2-ND			
0.1UF	C71	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88D, Digikey 490-3261-1-ND			
0.1UF	C67	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88D, Digikey 490-3261-1-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
0.1UF	C68	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
0.1UF	C73	1	402	Chip cap, X7R, 0402	16V, 10%, X7R, Murata GRM155R71C104KA88 D, Digikey 490-3261-1-ND			
TBD	C74	0	402				No-Stuff	
20UF	C69	1	1206	Chip cap, X5R, 1206	TDK,C3216X5R1E226M 160AB,CAP CER 22UF 25V 20% X5R 1206,Digikey# 445-6000-2-ND			
78.13nF	C72	1	402	Chip cap, X7R, 0402	KEMET,C0402C823K4R ACTU,CAP CER 0.082UF 16V 10% X7R 0402,Digikey# C0402C823K4RACTU			
10UF	C66	1	805	Chip cap, X7R, 0805	TDK,C2012X7R1A106K 125AC,CAP CER 10UF 10V 10% X7R 0805,Digikey# 445-6857-2-ND			
3.9nF	C75	1	402	Chip cap, X7R, 0402	KEMET,C0402C392K4R ACTU,CAP CER 3900PF 16V 10% X7R 0402,DIGIKEY# C0402C392K4RACTU-ND			
12pF_DNI	C76	0	402	Chip cap, NP0, 0402	KEMET,C0402C120J3G ACAUTO,CAP CER 12PF 25V 5% NP0 0402,DIGIKEY# 399-6829-2-ND		No-Stuff	
XFL4020-472ME	L12	1	XFL4020-472ME	INDUCTOR	COILCRAFT,XFL4020-472ME,			
XFL4020-472ME	L13	1	XFL4020-472ME	INDUCTOR	COILCRAFT,XFL4020-472ME,			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
10K	R96	1	603	SMT R,0603	Panasonic ERJ-3EKF1002V, 1%, 0.1W, 100ppm, Digikey P10.0KHCT-ND			
10K	R98	1	603	SMT R,0603	Panasonic ERJ-3EKF1002V, 1%, 0.1W, 100ppm, Digikey P10.0KHCT-ND			
0_DNL	R97	0	603	SMD R, +-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND		No-Stuff	
0_DNL	R99	0	603	SMD R, +-1%, 0603	Panasonic ERJ-3GEY0R00V, 0ohm, 0603, DigiKey# P0.0GCT-ND		No-Stuff	
TBD	R101	0	603				No-Stuff	
52.45K	R100	1	603		Vishay,PAT0603E5302B ST1,RES 53.0K OHM 0.15W 0.1% 0603,Digikey# PAT0603E5302BST1-ND			
20K	R104	1	603	SMD R, +-1%, 0603	Panasonic,ERJ-3EKF2002V,RES 20.0K OHM 1/10W 1% 0603 SMD,Digikey# P20.0KHTR-ND			
20K	R103	1	603	SMD R, +-1%, 0603	Panasonic,ERJ-3EKF2002V,RES 20.0K OHM 1/10W 1% 0603 SMD,Digikey# P20.0KHTR-ND			
34K	R102	1	603	SMD R, +-1%, 0603	Panasonic,ERJ-3EKF3402V,RES 34.0K OHM 1/10W 1% 0603 SMD,Digikey# P34.0KHTR-ND			

Part Type	Designator	Qty	Footprint	Description	Part Field 1	Consign	No-Stuff	Critical?
30K	R105	1	603	SMD R, +-1%, 0603	Panasonic,ERJ-3EKF3002V,RES 30.0K OHM 1/10W 1% 0603 SMD,Digikey# P30.0KHTR-ND			
5.69K	R106	1	603	SMD R, +-0.1%, 0603	Panasonic,PAT0603E5691BST1,RES 5.69K OHM 0.15W 0.1% 0603,Digikey# PAT0603E5691BST1-ND			
Test point-NO-STUFF	TP1	0	TEST_POINT_TH				No-Stuff	
Test point-NO-STUFF	TP2	0	TEST_POINT_TH				No-Stuff	
TPS65320	U21	1	TPS65320_Q_PW P	TPS65320QPWPQ1	TI,TPS65320QPWPQ1, Step Down Buck Regulator	Consign		
	R107	1	805	SMT R, +-1%,0805	PanasonicERJ-6GEY0R00V,0ohm,0805,DigiKey# P0.0ACT-ND			
SW-PB	S4	1			Panasonic EVQ-PNF04M push switch, DigiKey# P13597SCT-ND			
	R108	1	2512	SMT R, 2512	Vishay Dale,CRCW25120000Z0EGHP,RES 0.0 OHM 1.5W 2512 SMD,Digikey# 541-0.0RBCT-ND			
HEADER 3	JP12	1		1x3 header, male	Amp/Tyco, 0.1 pitch, 3-pin header, 87224-3, DigiKey# A26545-ND			

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