Filename: TIDA-01453 BOM (DS90UB947) .xls

Variant: 002
Generated: 9/23/2015 8:04:09 AM
SVN path: \$URL::
SVN rev: \$Rev:: \$

DS90UH947-Q1EVM

\$

Designation Description Manufacturer PartNumber Alternate Manufacturer Alternate PartNumber Co. Co. Co. Co. Co.		DS90UH947-Q1EVM						
CF CF CF CF CF		Quantity				Alternate Manufacturer	Alternate PartNumber	
C4. C5. C5. C5. C5. C5. C5. C5. C5. C5. C5						-	-	
CSC, CCA. CSC, C		10	CAP, CERM, 10 μF, 25 V, +/- 10%, X5R, 0805	Samsung	CL21A106KAFN3NE			
Col. Col. Col. Col. Col. Col. Col. Col.								
Control Cont								
C29, C41, C45, C47, C46, C47, C47, C47, C47, C47, C47, C47, C47		1.4	CAR CERM 100E 10V 1/10% Y7P 0805	MuPata	CDM24DD74A406KE54L			
C45, C47, C46, C47, C47, C47, C47, C47, C47, C47, C47		14	CAP, CERM, 100F, 10V, +7-10%, X/R, 0805	Murala	GRIVIZ IBR/ IA IUONES IL			
CBS. C106. C115. C135. C137 C7. C14. C33. C46. C33. C46. C33. C46. C34. C47. C34. C48. C37. C48. C37. C48. C38. C49. C49. C58. C49.								
C7, C1, C3, C4, C4, C3, C4, C4, C5, C5, C5, C6, C7, C7, C8, C8, C5, C6, C6, C6, C6, C6, C6, C6, C6, C6, C6								
C123, C137 C25, C147 C35, C147 C35, C147 C35, C147 C35, C147 C35, C148 C36, C37, C36, C36, C36, C36, C36, C36, C36, C36								
C133, C137								
C7, C14, S1								
CS4, CS5, CS8, CS8, CS8, CS8, CS8, CS8, CS8, CS8		31	CAP, CERM, 0.1uF, 16V, +/-10%, X7R, 0402	MuRata	GRM155R71C104KA88D			
C89, C70, C81, C82, C83, C83, C83, C84, C84, C85, C84, C85, C84, C85, C85, C85, C85, C85, C85, C85, C85	, ,							
C21, C81, C96, C97, C96, C97, C98, C98, C98, C97, C98, C98, C98, C98, C97, C98, C98, C98, C98, C97, C98, C98, C98, C98, C98, C98, C98, C98								
C82, C84, C86, C87, C86, C174, C86, C174, C87, C174, C87, C174, C177, C176, C176, C177, C176, C177, C176, C177,								
CORD. CTIOS. CTI								
C105, C107, C108, C113,	C96, C97,							
C107, C108, C108, C109,								
C110, C111,								
C110, C111, C113, C122, C126, C128, C129, C127, C128, C128, C129, C127, C128, C128, C129, C127, C128, C129, C127, C128, C129, C127, C128, C129, C128, C129,								
C111, C112, C126, C128, C131, C132, C132, C132, C132, C132, C134, C132, C134,								
C117, C122, C126, C128, C128, C138,	C111,							
C121, C122, C126, C129, C131, C122, C131, C122, C131, C122, C131, C122, C131, C132, C132, C132, C132, C132, C133, C132, C132, C132, C133, C134, C132, C134, C134, C132, C134,								
C122, C128, C129, C131, C132, C131, C132, C132, C133, C134, C132, C134,								
C128, C131, C132, C136, C136, C2, C4P, TA, 1tp. 169, At-10%, 9.3 xhm, SMD								
C131, C132, C136, C136 G3, C24								
C132, C135, C136 C8, C24 2 CAP, TA, 1uF, 16V, +/-10%, 9.3 ohm, SMD	C129,							
C136, C136 C24 2 CAP, TA, TuF, 16V, +/-10%, 9.3 ohm, SMD								
C36, C24 2 CAP, TA, 1uF, 16V, 4-10W, 9.3 ohm, SMD								
C9, C124		2	CAP. TA. 1uF. 16V. +/-10%. 9.3 ohm. SMD	Vishav-Sprague	293D105X9016A2TE3			
C130, C134 C20, C31, C128 C12								
C21, C31, C128 C12 1 CAP, CERM, 0.01uF, 100V, +/-5%, X7R, 0603 C12 1 CAP, CERM, 0.01uF, 25V, +/-5%, X7R, 0603 C12 C15, C17, C16, C26, C27, C33, C34, C40, C41, C42, C57, C58, C59, C67, C88, C77, C80 C19, C28, C39, C34, C40, C41, C42, C57, C58, C59, C67, C88, C77, C80 C19, C28, C39, C34, C40, C41, C42, C57, C58, C59, C67, C88, C77, C80 C19, C28, C39, C34, C40, C41, C42, C57, C58, C59, C67, C88, C77, C80 C19, C28, C39, C38, C44, C60 C22, C30, C37, C38, C44, C60 C22, C30, C37, C38, C44, C60 C24, C30, C37, C38, C48, C83, C120 C49 1 CAP, CERM, 150pF, 50V, +/-5%, C0G/NP0, 0402 C49 1 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata CRM15SSC1H15JJA01D C62, C61, 3 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata CRM15SSC1H15JJA01D C62, C61, 3 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata C73, C73, C73, C73, C73, C73, C73, C73,		4	CAP, CERM, 4.7 µF, 16 V, +/- 10%, X7R, 0805	MuRata	GRM21BR71C475KA73L			
C20, C31 C12 C12 C12 C12 C13 C12 C14 C15, C17, C18, C26, C27, C33 C34, C40, C41, C42, C57, C58, C59, C68, C79, C88, C77, C80 C19, C28, C34, C30 C40, C41, C42, C57, C58, C59, C67, C88, C77, C80 C19, C28, C34, C30 C49, C24, C30 C49, C24, C30 C49, C25, C30, C34, C36, C34, C36, C37, C38, C38, C36, C39, C38, C39, C38, C39, C39, C39, C38, C39,		5	CAP CERM 0.01uF 100V +/-5% X7R 0603	A\/X	06031C103 IAT2A			
C12		Ü	7.11, 0.21.11, 0.01.11, 1.00.1, 1, 0,0, 7.11.1, 0.000	,,	0000101000711271			
C16, C17, C18, C26, C27, C33, C34, C40, C41, C42, C57, C58, C59, C69, C77, C69, C78, C69, C79, C69, C79, C69, C79, C69, C79, C69, C79, C69, C79, C78, C78, C78, C78, C78, C78, C78, C78								
C18, C26, C27, C33, C34, C40, C41, C42, C57, C58, C59, C68, C99, C68, C77, C80 C19, C28, 6 C35, C36, C44, C60 C44, C60 C22, C30, C37, C38, C48, C63, C120 C38, C38, C48, C63, C120 C120 C39, C38, C48, C61, C120 C52, C61, 3 CAP, CERM, 1pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H151,JA01D C52, C61, 3 CAP, CERM, 1pF, 16V, +/-10%, X7R, 0603 TDK C1608X7R1C105K C52, C61, 3 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H10JA01D C63, C112 C3AP, CERM, 1uF, 63V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 2930226X0020D2TE3 C64 1 CAP, CERM, 1uF, 63V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 2930226X0020D2TE3 C66 1 CAP, CERM, 0.1 uF, 10V, +/-10%, X7R, 0605 AVX 08051C103KAT2A C73, C74, 4 4 CAP, CERM, 0.1 uF, 10V, +/-10%, C0G/NP0, 0402 TDK C1005X5R0J106M C87, C78 1						-	-	
C27, C33, C34, C40, C41, C42, C57, C58, C67, C68, C77, C60 C36, C77, C60 C78, C78, C78, C78, C78, C78, C78, C78,		17	CAP, CERIVI, 0.01UP, 50V, +/-10%, COG/NPO, 0402	Murala	GCW155K71H105KA55D			
C41, C42, C57, C58, C59, C67, C68, C77, C60, C78, C67, C68, C77, C60, C78, C67, C68, C79, C67, C68, C79, C67, C78, C78, C78, C78, C78, C78, C78, C7	, ,							
C57, C58, C58, C78, C68, C77, C80 C79, C28, C36, C36, C36, C36, C36, C36, C36, C36								
CS9, C67, C68, C77, C68, C77, C68, C77, C69, C68, C77, C69, C69, C69, C69, C69, C69, C69, C69								
C68, C77, C80 C19, C28, C35, C36, C35, C36, C36, C36, C36, C36, C36, C36, C36								
C80 CAP, CERM, 0.1 μF, 50 V, +/- 10%, X7R, 0603 MuRata GRM188R71H104KA93D C35, C36, C36, C44, C60 C22, C30, T CAP, CERM, 1 μF, 35 V, +/- 10%, JB, 0402 TDK C1005JB1V105K050BC C37, C38, C48, C63, C120 C49 1 CAP, CERM, 150pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H151JA01D C52, C61, 3 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H151JA01D C53, C112 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H100JA01D C62 1 CAP, TA, 22uF, 20V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 293D226K0020D2TE3 C64 1 CAP, TA, 22uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D226K0020D2TE3 C65 1 CAP, TA, 2.2uF, 25V, +/-10%, K7R, 0805 AVX 08051C103KAT2A C73, C74, C74, C74, 4 CAP, CERM, 0.1 µF, 50 V, +/-10%, COG/NPO, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 0.1 µF, 50 V, +/-5%, COG/NPO, 0603 AVX 08051C103KAT2A C100 1 CAP, CERM, 20 pF, 50 V, +/-10%, COG/NPO, 0603 AVX 0603SA221FAT2A C100 1 CAP, CERM, 20 pF, 50 V, +/-10%, COG/NPO, 060								
C35, C36, C44, C60 C22, C30, C24, C60 CAP, CERM, 1 μF, 35 V, +/- 10%, JB, 0402 TDK C1005JB1V105K050BC C37, C38, C420 C48, C63, C120 C49 1 CAP, CERM, 150pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H151JA01D C52, C61, 3 CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603 TDK C1608X7R1C105K C119 C53, C112 2 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H100JA01D C62 1 CAP, TA, 22uF, 20V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 293D226X0020D2TE3 C64 1 CAP, TA, 22uF, 2V, +/-9%, X5R, 0402 TDK C1005X5R0J105M C65 1 CAP, TA, 2.2uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D225X00250E7E3 C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C73, C74, 4 CAP, CERM, 0.1 µF, 50 V, +/- 10%, C0G/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, C0G/NP0, 0603 AVX G6035A5221FAT2A C100 1 CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603 MuRata GRM1885C14R7CA01D C99, C101 2 CAP, CERM, 200 pF, 50 V, +/- 10%, C0G/NP0, 0603								
C44, C60 C22, C30, C37, C38, C48, C63, C120 T CAP, CERM, 1 μF, 35 V, +/- 10%, JB, 0402 TDK C1005JB1V105K050BC C37, C38, C48, C63, C120 1 CAP, CERM, 150pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H151JA01D C52, C61, C119 2 CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603 TDK C1608X7R1C105K C53, C112 2 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H100JA01D C62 1 CAP, TA, 22uF, 20V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 293D22E00020DZTE3 C64 1 CAP, CERM, 11p, 6.3V, +/-20%, XSR, 0402 TDK C1005X5R0J105M C65 1 CAP, CERM, 01uF, 6.3V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D225X9025B2TE3 C66 1 CAP, CERM, 0.1uF, 100V, +/-10%, C0G/NP0, 0402 AVX 08051C103KAT2A C73, C74, C74 4 CAP, CERM, 0.1 µF, 50 V, +/- 19%, C0G/NP0, 0402 TDK C1005X7R1H104K C76, C78 2 CAP, CERM, 4.7pF, 25V, +/-5%, C0G/NP0, 0603 AVX 06035A221FAT2A C99, C103 2 CAP, CERM, 20 pF, 50 V, +/- 1%, C0G/NP0, 0603 AVX 06035A221FAT2A C1002 1 CAP, CERM, 20 pF, 50 V, +/- 1%, C0G/NP0, 0603 MuRata GRM1585C1E4R7CA01D C30 1 CAP, CERM, 20 pF, 50 V, +/- 19%, X7R, 0603		6	CAP, CERM, 0.1 μF, 50 V, +/- 10%, X7R, 0603	MuRata	GRM188R71H104KA93D			
C22, C30, C37, C38, C37, C38, C120 7 CAP, CERM, 1 μF, 35 V, +/- 10%, JB, 0402 TDK C1005JB1V105K050BC C48, C63, C120 1 CAP, CERM, 150pF, 50V, +/- 5%, COG/NP0, 0402 MuRata GRM1555C1H151JA01D C52, C61, 3 CAP, CERM, 10pF, 50V, +/- 5%, COG/NP0, 0402 MuRata GRM1555C1H10JA01D C53, C112 2 CAP, CERM, 10pF, 50V, +/- 5%, COG/NP0, 0402 MuRata GRM1555C1H100JA01D C62 1 CAP, TA, 22uF, 20V, +/-20%, V5R, 0402 TDK C1005X5R0J105M C64 1 CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402 TDK C1005X5R0J105M C65 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, COG/NP0, 0402 TDK C1005X7R1H104K C73, C74, C76, C78 4 CAP, CERM, 0.1 µF, 50 V, +/- 10%, COG/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 5%, COG/NP0, 0603 AVX 06035A221FAT2A C100 1 CAP, CERM, 220 pF, 50 V, +/- 1%, COG/NP0, 0603 MuRata GRM18857CA200JA01D C102								
C37, C38, C48, C63, C120 C49		7	CAP, CERM, 1 µF, 35 V, +/- 10%, JB, 0402	TDK	C1005JB1V105K050BC			
C48, C63, C120 C49 1 CAP, CERM, 150pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H151JA01D C52, C61, C52, C61, C61, C63, C119 3 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H100JA01D C63, C112 2 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H100JA01D C62 1 CAP, TA, 22uF, 20V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 293D226X0020D2TE3 C64 1 CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402 TDK C1005X5R0J105M C65 1 CAP, TA, 22uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D225X9025B2TE3 C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C73, C74, 4 4 CAP, CERM, 0.1 µF, 50 V, +/-10%, C0G/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, C0G/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 50 V, +/-1%, C0G/NP0, 0603 AVX 06035A221FAT2A C100 1 CAP, CERM, 20 pF, 50 V, +/-10%, X7R, 0603 Kemet C0603X222K5RACTU C102 1 CAP, CERM, 200 pF, 50 V, +/-10%, X7R, 0603			, , , , , , , , , , , , , , , , , , , ,					
C49 1 CAP, CERM, 150pF, 50V, +/-5%, COG/NP0, 0402 MuRata GRM1555C1H151JA01D C52, C61, 3 CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603 TDK C1608X7R1C105K C119 C53, C112 2 CAP, CERM, 10pF, 50V, +/-5%, COG/NP0, 0402 MuRata GRM1555C1H100JA01D C62 1 CAP, TA, 22uF, 20V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 293D226X0020D2TE3 C64 1 CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402 TDK C1005X5R0J105M C65 1 CAP, TA, 2.2uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D225X9025B2TE3 C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C73, C74, 4 CAP, CERM, 0.1 µF, 50 V, +/- 10%, COG/NP0, 0402 TDK C1005X7R1H104K C76, C78 C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, COG/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 20 pF, 100 V, +/- 5%, COG/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 10%, X7R, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 200 pF, 50 V, +/- 10%, X7R, 0603 MuRata GRM18871C474KA88D C114 1 CAP, CERM, 0.00F, 16V, +/-109%, X7R, 0603 MuRata GRM18871C474KA88D C114 1 CAP, CERM, 3000pF, 50V, +/-109%, X7R, 0402 MuRata GRM32ER61C476ME15L C115 1 CAP, CERM, 3000pF, 50V, +/-10%, X7R, 0402 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3000pF, 50V, +/-10%, X7R, 0402 MuRata GRM155F1H332KA01D C125 1 CAP, CERM, 3000pF, 50V, +/-10%, X7R, 0402 MuRata GRM155F1H332KA01D D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000	C48, C63,							
C52, C61, C119 3 CAP, CERM, 1uF, 16V, +/-10%, X7R, 0603 TDK C1608X7R1C105K C53, C112 2 CAP, CERM, 10pF, 50V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1H100JA01D C62 1 CAP, TA, 22uF, 20V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 293D226X0020DZTE3 C64 1 CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402 TDK C1005X5R0J105M C65 1 CAP, TA, 2.2uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D2225X9025BZTE3 C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103XAT2A C73, C74, C78 4 CAP, CERM, 0.1 µF, 50 V, +/- 10%, C0G/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, C0G/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 220 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/-20%, X5R, 1210 MuRata GRM188R71C474KA88D C114 1		- 4	CAD CEDM 4500E 50V 1/50/ 000/ND0 0400	MuPoto	ODMAEEGALIAET 1804B			
C119								
C62 1 CAP, TA, 22uF, 20V, +/-20%, 0.7 ohm, SMD Vishay-Sprague 293D226X0020D2TE3 C64 1 CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402 TDK C1005X5R0J105M C65 1 CAP, TA, 2.2uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D225X9025B2TE3 C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C73, C74, 4 CAP, CERM, 0.1 μF, 50 V, +/- 10%, COG/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, COG/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, COG/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 50 V, +/- 1%, COG/NP0, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 20 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C114 1 CAP, TA, 100uF, 16V, +/-20%, X5R, 1210 MuRata GRM32ER61C476ME15L C115 1 CAP, CERM, 3300			,,,,,,,,,,,,					
C64 1 CAP, CERM, 1uF, 6.3V, +/-20%, X5R, 0402 TDK C1005X5R0J105M C65 1 CAP, TA, 2.2uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D225X9025B2TE3 C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C73, C74, C76, C78 4 CAP, CERM, 0.1 μF, 50 V, +/- 10%, C0G/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, C0G/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, C0G/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 5%, C0G/NP0, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM155R71H332KA01D C125 1								
C65 1 CAP, TA, 2.2uF, 25V, +/-10%, 3.8 ohm, SMD Vishay-Sprague 293D225X9025B2TE3 C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C73, C74, C76, C78 4 CAP, CERM, 0.1 μF, 50 V, +/- 10%, COG/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, COG/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, COG/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 5%, COG/NP0, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM132ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1								
C66 1 CAP, CERM, 0.01uF, 100V, +/-10%, X7R, 0805 AVX 08051C103KAT2A C73, C74, C76, C78 4 CAP, CERM, 0.1 μF, 50 V, +/- 10%, COG/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, COG/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, COG/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 5%, COG/NP0, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS7500								
C73, C74, C76, C78 4 CAP, CERM, 0.1 μF, 50 V, +/- 10%, COG/NP0, 0402 TDK C1005X7R1H104K C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, COG/NP0, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, COG/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 5%, COG/NP0, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 2930225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000								
C87, C88 2 CAP, CERM, 4.7pF, 25V, +/-5%, COG/NPO, 0402 MuRata GRM1555C1E4R7CA01D C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, COG/NPO, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 5%, COG/NPO, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/- 10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/- 20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/- 20%, X5R, 1210 MuRata GRM132ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/- 10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/- 10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000	C73, C74,							
C99, C103 2 CAP, CERM, 220 pF, 50 V, +/- 1%, COG/NP0, 0603 AVX 06035A221FAT2A C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 5%, COG/NP0, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X22ZK5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/- 10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/- 20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/- 20%, X5R, 1210 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000		_			0014			
C100, C101 2 CAP, CERM, 20 pF, 100 V, +/- 5%, COG/NP0, 0603 MuRata GRM1885C2A200JA01D C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/- 10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000								
C102 1 CAP, CERM, 2200 pF, 50 V, +/- 10%, X7R, 0603 Kemet C0603X222K5RACTU C109 1 CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000								
C109 1 CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603 MuRata GRM188R71C474KA88D C114 1 CAP, TA, 100uF, 16V, +/-20%, 0.1 ohm, SMD Kemet T495D107M016ATE100 C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 2930225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000								
C115 1 CAP, CERM, 47uF, 16V, +/-20%, X5R, 1210 MuRata GRM32ER61C476ME15L C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000	C109	1	CAP, CERM, 0.47uF, 16V, +/-10%, X7R, 0603	MuRata	GRM188R71C474KA88D			
C118 1 CAP, CERM, 3300pF, 50V, +/-10%, X7R, 0402 MuRata GRM155R71H332KA01D C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000								
C125 1 CAP, TA, 2.2uF, 25V, +/-10%, 6.3 ohm, SMD Vishay-Sprague 293D225X9025A2TE3 D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000								
D1, D6, D7, 5 LED, Green, SMD Wurth Elektronik eiSos 150060VS75000								
D9, D10	D1, D6, D7,							
	D9, D10							

Designator	Quantity	Description	Manufacturer	PartNumber	Alternate Manufacturer	Alternate PartNumber
D3	1	LED, Orange, SMD	Lite-On	LTST-C190KFKT		
D4	1	LED, Green, SMD	Lite-On	LTST-C190GKT		
D8	1	Diode, Schottky, 40V, 1A, SOD-123	Diodes Inc.	1N5819HW-7-F		
D11	1	Diode, Zener, 7.5V, 550mW, SMB	ON Semiconductor	1SMB5922BT3G		
F1	1	Fuse, 7 A, 24 V, SMD	Littelfuse	0429007.WRML		
FID1, FID2, FID3	3	Fiducial mark. There is nothing to buy or mount.	N/A	N/A		
H1, H2, H5,	6	Standoff, Hex, 0.5"L #4-40 Nylon	Keystone	1902C	_	_
H6, H9, H11			,	1.0020		
H3, H4, H7,	6	Machine Screw, Round, #4-40 x 1/4, Nylon, Philips	B&F Fastener Supply	NY PMS 440 0025 PH	-	-
H8, H10,		panhead				
H12						
J1	1	Connector, Audio Jack, 3.5mm, Stereo, SMD	CUI Inc.	SJ-3523-SMT		
J2, J5, J6,	34	Header, 100mil, 2x1, Gold, TH	TE Connectivity	5-146261-1		
J7, J8, J15,						
J16, J22,						
J23, J24, J27, J28,						
J30, J32,						
J35, J39,						
J42, J45,						
J46, J47,						
J48, J49,						
J50, J51,						
J53, J54,						
J55, J56,						
J58, J59,						
J61, J65,						
J66, J67	44	Handar 400mil Ond Cald Till	0	TOW 400 07 O O		
J3, J14,	11	Header, 100mil, 3x1, Gold, TH	Samtec	TSW-103-07-G-S		
J18, J19, J26, J33,						
J37, J40,						
J41, J44,						
J60						
J4, J62,	4	Header, 100mil, 3x1, Tin, TH	TE Connectivity	5-146278-3		
J63, J64						
J9, J11,	4	Connector, End launch SMA, 50 ohm, SMT	Emerson Network	142-0701-851		
J12, J13			Power			
J10, J43	2	Header, TH, 100mil, 10x2, Gold plated, 230 mil above insulator	Samtec	TSW-110-07-G-D		
J20	1	Header, 100mil, 4x1, White, TH	Molex	0022112042		
J21	1	Header, TH, 100mil, 16x2, Gold plated, 230 mil above	Samtec, Inc.	TSW-116-07-G-D		
		insulator				
J25	1	Header, TH, 100mil, 4x1, Gold plated, 230 mil above	Samtec, Inc.	TSW-104-07-G-S		
		insulator				
J29	1	Connector, Receptacle, Mini-USB Type B, R/A, Top	TE Connectivity	1734035-2		
104	4	Mount SMT	Culling Course	DECOZDA ANI		
J31	1	Header, 100mil, 7x2, Tin, TH	Sullins Connector Solutions	PEC07DAAN		
J36	1	Connector, DC Jack 2.1X5.5 mm, TH	CUI Inc.	PJ-102A		
J57	1	Header, 100mil, 5x2, Tin, TH	Sullins Connector	PEC05DAAN		
557	'		Solutions	. 2000/// (14		
J68	1	Standard Banana Jack, Insulated, Black	Keystone	6092		
J69	1	Standard Banana Jack, Insulated, Red	Keystone	6091		
L1, L7, L13	3	1.5A Ferrite Bead, 330 ohm @ 100MHz, SMD	MuRata	BLM18SG331TN1D		
L2	1	Ferrite Bead, 1000 ohm @ 100 MHz, 0.35 A, 0402	MuRata	BLM15AX102SN1D		
L3, L5	2	Ferrite Bead, 1000 ohm @ 100 MHz, 0.8 A, 0603	TDK	MPZ1608S102ATA00		
L4, L6, L8	3	Ferrite Bead, 120 ohm @ 100 MHz, 3 A, 0603	MuRata	BLM18SG121TN1D		
L9	1	Ferrite Bead, 60 ohm @ 100MHz, 0.8A, 0603	Taiyo Yuden	BK1608HS600-T		
L10, L11	2	Coupled inductor, 0.28 A, 0.41 ohm, +/- 25%, SMD	MuRata	DLW21SN900HQ2L		
L14	1	Inductor, Shielded Drum Core, Ferrite, 4.7uH, 4.2A, 0.02 ohm, SMD	Wurth Elektronik eiSos	7440650047		
LBL1	1	Thermal Transfer Printable Labels, 0.650" W x 0.200"	Brady	THT-14-423-10	_	_
LDLI	'	H - 10,000 per roll	Diauy	1111-14-420-10	_	
P1	1	HSD Right Angle Plug for PCB, TH	Rosenberger	D4S20D-40ML5-Z		
Q3, Q4	2	MOSFET, N-CH, 50 V, 0.22 A, SOT-23	Fairchild Semiconductor		None	
R1, R2	2	RES, 100 ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW0402100RFKED		

			T	1	Tas:	Inc
Designator		Description	Manufacturer	PartNumber	Alternate Manufacturer	Alternate PartNumber
R3, R7, R9,	36	RES, 0, 5%, 0.063 W, 0402	Panasonic	ERJ-2GE0R00X		
R10, R16,						
R20, R21,						
R22, R32,						
R34, R38,						
R39, R42,						
R43, R106,						
R107,						
R111,						
R126,						
R127,						
R131,						
R134,						
R135,						
R136,						
R137,						
R138,						
R139,						
R140,						
R141,						
R143,						
R144,						
R145,						
R146,						1
R163,						1
R198,						
R203, R206						
R4, R5, R6,	17	RES, 10.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0FKED		
R8, R24,						
R29, R103,						
R104,						
R112,						
R116,						
R118,						
R154,						
R156,						
R181, R184,						
R194, R208	^	DES 0 5% 0.1 W 0602	Vichov Dolo	CBCW06020007054		
R13, R33,	9	RES, 0, 5%, 0.1 W, 0603	Vishay-Dale	CRCW06030000Z0EA		
R36, R158,						
R160,						
R189,						
R195,						
R204, R207						
R17, R40,	3	RES, 49.9, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040249R9FKED		
R110						
R18, R19	2	RES, 0, 5%, 0.05 W, 0201	Panasonic	ERJ-1GE0R00C		
R23, R35,	4	RES, 2.4 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04022K40JNED		
R148, R173						
R25, R37	2	RES, 0, 5%, 0.063 W, 0402	Yageo America	RC0402JR-070RL		
R27, R123,	3	RES, 4.7k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW04024K70JNED		
R124						
R30	1	RES, 470 ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW0402470RJNED		
R31, R152	2	RES, 180, 5%, 0.063 W, 0402	Vishay-Dale	CRCW0402180RJNED		
R41, R193,	5	RES, 100k ohm, 5%, 0.063W, 0402	Vishay-Dale	CRCW0402100KJNED		
R196,	-	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
R200, R205						
R49, R60,	4	RES, 115 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402115KFKED		
R79, R85		., , ,	, 20.0			
R50, R71,	4	RES, 107 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402107KFKED		
R86, R98			1.0.0, 500	THE STATE OF THE PARTY OF THE P		
R51, R87	2	RES, 113 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402113KFKED		
R52, R88	2	RES, 82.5 k, 1%, 0.063 W, 0402	Vishay-Dale Vishay-Dale	CRCW0402113KFKED		
R52, R89	2	RES, 52.5 k, 1%, 0.063 W, 0402	Vishay-Dale Vishay-Dale	CRCW040251K1FKED		
R54, R67,	4	RES, 30.9 k, 1%, 0.063 W, 0402	Vishay-Dale Vishay-Dale	CRCW040231K1FKED		
	4	NEO, 30.3 K, 1/0, 0.003 W, 0402	v isi iay-Dale	CI/CAA040590KALKED		
R90, R94		DEC 40.2 k 40/ 0.062 W 0.402	Viehov Dola	CDCW040046K0FKFD		
R55, R64,	6	RES, 40.2 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040240K2FKED		
R66, R75,						
R91, R93		DED 1001 101 0 100) a			
R58	1	RES, 133 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402133KFKED		
R59	1	RES, 147 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402147KFKED		
R61, R69,	4	RES, 90.9 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040290K9FKED		
R78, R96						
R62	1	RES, 66.5 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040266K5FKED		
R63	1	RES, 21.5 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040221K5FKED		
R68, R95	2	RES, 52.3 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040252K3FKED		
R70, R97	2	RES, 105 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402105KFKED		
R72, R99	2	RES, 118 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW0402118KFKED		
R76	1	RES, 35.7 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040235K7FKED		
R77	1	RES, 71.5 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040271K5FKED		
R80	1	RES, 137 k, 1%, 0.063 W, 0402	Vishay-Dale Vishay-Dale	CRCW0402137KFKED		
R81		RES, 80.6 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040280K6FKED		
R102	1	RES, 1.0 k, 5%, 0.063 W, 0402	Vishay-Dale	CRCW04021K00JNED		
R108, R109	2	RES, 1.50k ohm, 1%, 0.063W, 0402	Vishay-Dale	CRCW04021K50FKED		

Designator Quantity Description Manufacturer PartNumber Alternation R115, R117, R119, 9 RES, 100, 1%, 0.05 W, 0201 Panasonic ERJ-1GEF1000C	
R115, 9 RES, 100, 1%, 0.05 W, 0201 Panasonic ERJ-1GEF1000C	ate Manufacturer Alternate PartNumber
R117,	
1 1110,	
R120,	
R121,	
R122,	
R125,	
R128, R130	
R132 1 RES, 0.51, 1%, 0.1 W, AEC-Q200 Grade 1, 0603 Panasonic ERJ-3RQFR51V	
R133, 3 RES, 3.24k ohm, 1%, 0.063W, 0402 Vishay-Dale CRCW04023K24FKED	
R157, R159	
R149, R174 2 RES, 220, 5%, 0.063 W, 0402 Vishay-Dale CRCW0402220RJNED	
R153, R178 2 RES, 1.5 k, 5%, 0.063 W, 0402 Vishay-Dale CRCW04021K50JNED	
R155 1 RES, 3.0 k, 5%, 0.063 W, 0402 Vishay-Dale CRCW04023K00JNED	
R161 1 RES, 1.65k ohm, 1%, 0.063W, 0402 Vishay-Dale CRCW04021K65FKED	
R162 1 RES, 1.37k ohm, 1%, 0.063W, 0402 Vishay-Dale CRCW04021K37FKED	
R176, R177 2 RES, 33 ohm, 5%, 0.063W, 0402 Vishay-Dale CRCW040233R0JNED -	-
R179, R182 2 RES, 33k ohm, 5%, 0.063W, 0402 Vishay-Dale CRCW040233K0JNED -	-
R180 1 RES, 1.2 M, 5%, 0.1 W, 0603 Vishay-Dale CRCW06031M20JNEA	
R183 1 RES, 200 ohm, 5%, 0.063W, 0402 Vishay-Dale CRCW0402200RJNED	
R187 1 RES, 22.1k ohm, 1%, 0.063W, 0402 Vishay-Dale CRCW040222k1FKED	
R188 1 RES, 124k ohm, 1%, 0.063W, 0402 Vishay-Dale CRCW0402124KFKED	
R197 1 RES, 1.87k ohm, 1%, 0.063W, 0402 Vishay-Dale CRCW04021K87FKED	
R199 1 RES, 4.99k ohm, 1%, 0.063W, 0402 Vishay-Dale CRCW04024K99FKED	
S1 1 Switch, Slide, SPST 3 poles, SMT CTS Electrocomponents 219-3LPST	
S2, S3, S6 3 Switch, Slide, SPST 8 poles, SMT CTS Electrocomponents 219-8MST	
S4, S9 2 Switch, Normally open, 2.3N force, 200k operations, C and K Components KSR221GLFS	
SMD	
S5 1 DIP Switch, 4 position slide actuator, SPST, SMD Omron Electronic A6S-4104-H	
Components	
SH-J4, SH- 14 Shunt, 100mil, Gold plated, Black 3M 969102-0000-DA Samted	SNT-100-BK-G
	3N1-100-DK-G
J14, SH-	
J16, SH-	
J18, SH-	
J19, SH-	
J26, SH-	
J33, SH-	
J37, SH-	
340, SH-	
J41, SH-	
J46, SH-	
J48, SH-	
J49, SH-	
U2 1 1080p OpenLDI to FPD-Link III Serializer with HDCP, Texas Instruments DS90UH947RGCQ1 None	
U3 1 SINGLE-ENDED, ANALOG-INPUT 24-BIT, 96-kHz Texas Instruments PCM1808PW None	
STEREO A/D CONVERTER, PW0014A	
U4 1 Single Output Automotive LDO, 750 mA, Fixed 5 V Texas Instruments TL751M05QKVURQ1 None	Equivalent
Output, 6 to 26 V Input, 5-pin PFM (KVU), -40 to 125	Equivalent
degC, Green (RoHS & no Sb/Br)	
U5 1 4-CHANNEL ESD-PROTECTION ARRAY FOR HIGH- Texas Instruments TPD4E004DRY Texas I	Instruments
SPEED DATA INTERFACES, DRY006A	
	Instruments
U7 1 TCA9406 Dual Bidirectional 1-MHz I2C-BUS and Texas Instruments TCA9406DCUR None	Equivalent
SMBus Voltage Level-Translator, 1.65 to 3.6 V, -40 to	'
85 degC, 8-pin US8 (DCU), Green (RoHS & no Sb/Br)	
	Instruments
TRANSLATOR WITH AUTO-DIRECTION SENSING	
AND ±15-kV ESD PROTECTION, PW0016A	
	F
U10 1 Single Output LDO, 500 mA, Adjustable 0.8 to 3.6 V Texas Instruments TPS74701DRCR None	Equivalent
Output, 0.8 to 5.5 V Input, with Programmable Soft	
Start, 10-pin SON (DRC), -40 to 125 degC, Green	
(RoHS & no Sb/Br)	
U11 1 Dual Output LDO, 1 A, Fixed 1.8, 3.3 V Output, 2.7 to Texas Instruments TPS767D318PWP None	Equivalent
10 V Input, 28-pin HTSSOP (PWP), -40 to 125 degC,	· ·
Green (RoHS & no Sb/Br)	
U12 1 800 mA Fast-Response High-Accuracy Adjustable Texas Instruments LP38851S-ADJ/NOPB	
LDO Linear Regulator with Enable and Soft-Start, 7-pin	
TO-263, Pb-Free	
U17 1 500mA, Low Quiescent Current, Ultra-Low Noise, High Texas Instruments TPS73533DRBR Texas I	Instruments TPS73533DRBT
PSRR Low-Dropout Linear Regulator, DRB0008A	
PSRR Low-Dropout Linear Regulator, DRB0008A	
PSRR Low-Dropout Linear Regulator, DRB0008A	
PSRR Low-Dropout Linear Regulator, DRB0008A Y1 1 OSC, 12.288 MHz, 3.3 Vdc, SMD ECS Inc. ECS-8FA3X-122.8-TR Y2 1 OSC, 96 MHz, 3.3 Vdc, SMD Fox Electronics FXO-HC736R-96	
PSRR Low-Dropout Linear Regulator, DRB0008A	
PSRR Low-Dropout Linear Regulator, DRB0008A Y1	
PSRR Low-Dropout Linear Regulator, DRB0008A Y1	

Designator	Quantity	Description	Manufacturer	PartNumber	Alternate Manufacturer	Alternate PartNumber
R44, R45,	0	RES, 51, 5%, 0.063 W, 0402	Vishay-Dale	CRCW040251R0JNED		
R46, R47,			,			
R165,						
R166,						
R167,						
R168,						
R169,						
R170,						
R171,						
R172,						
R190, R191						
R48, R56,	0	RES, 0, 5%, 0.063 W, 0402	Panasonic	ERJ-2GE0R00X		
R57, R65,						
R73, R74,						
R82, R83,						
R84, R92,						
R100,						
R101,						
R113,						
R142,						
R147, R192 R105	0	RES, 10.0 k, 1%, 0.063 W, 0402	Vishay-Dale	CRCW040210K0FKED		
R114, R164	0	RES, 3.24k ohm, 1%, 0.063W, 0402	Vishay-Dale Vishay-Dale	CRCW040210K0FKED		
R209	0	RES, 0, 5%, 0.063 W, 0402	Vishay-Dale Vishay-Dale	CRCW04023K24FKED		
U1	0	Single High Speed Differential Driver, 8-pin Narrow	Texas Instruments	DS90LV017ATM/NOPB		
01	U	SOIC, Pb-Free	Texas instruments	D390EV017A1W/NOFB		
U9	0	4.5V to 18V Input, 2-A Synchronous Step-Down	Texas Instruments	TPS54225PWPR	Texas Instruments	TPS54225PWP
		SWIFT™ Converter, PWP0014E				
U15	0	Low-Capacitance + / - 15 kV ESD-Protection Array for	Texas Instruments	TPD2E001DRLR	None	Equivalent
		High-Speed Data Interfaces, 2 Channels, -40 to +85				·
		degC, 5-pin SOT (DRL), Green (RoHS & no Sb/Br)				
X2	0	OSC, 170 MHz, 3.3 Vdc, SMD	Fox Electronics	FXO-LC735R-170		

Notes

Substitutions made according to Alternate PartNumber must meet datasheet parameters, not just the Description specified.

IMPORTANT NOTICE FOR TI DESIGN INFORMATION AND RESOURCES

Texas Instruments Incorporated ('TI") technical, application or other design advice, services or information, including, but not limited to, reference designs and materials relating to evaluation modules, (collectively, "TI Resources") are intended to assist designers who are developing applications that incorporate TI products; by downloading, accessing or using any particular TI Resource in any way, you (individually or, if you are acting on behalf of a company, your company) agree to use it solely for this purpose and subject to the terms of this Notice.

TI's provision of TI Resources does not expand or otherwise alter TI's applicable published warranties or warranty disclaimers for TI products, and no additional obligations or liabilities arise from TI providing such TI Resources. TI reserves the right to make corrections, enhancements, improvements and other changes to its TI Resources.

You understand and agree that you remain responsible for using your independent analysis, evaluation and judgment in designing your applications and that you have full and exclusive responsibility to assure the safety of your applications and compliance of your applications (and of all TI products used in or for your applications) with all applicable regulations, laws and other applicable requirements. You represent that, with respect to your applications, you have all the necessary expertise to create and implement safeguards that (1) anticipate dangerous consequences of failures, (2) monitor failures and their consequences, and (3) lessen the likelihood of failures that might cause harm and take appropriate actions. You agree that prior to using or distributing any applications that include TI products, you will thoroughly test such applications and the functionality of such TI products as used in such applications. TI has not conducted any testing other than that specifically described in the published documentation for a particular TI Resource.

You are authorized to use, copy and modify any individual TI Resource only in connection with the development of applications that include the TI product(s) identified in such TI Resource. NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER TI INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT OF TI OR ANY THIRD PARTY IS GRANTED HEREIN, including but not limited to any patent right, copyright, mask work right, or other intellectual property right relating to any combination, machine, or process in which TI products or services are used. Information regarding or referencing third-party products or services does not constitute a license to use such products or services, or a warranty or endorsement thereof. Use of TI Resources may require a license from a third party under the patents or other intellectual property of TI.

TI RESOURCES ARE PROVIDED "AS IS" AND WITH ALL FAULTS. TI DISCLAIMS ALL OTHER WARRANTIES OR REPRESENTATIONS, EXPRESS OR IMPLIED, REGARDING TI RESOURCES OR USE THEREOF, INCLUDING BUT NOT LIMITED TO ACCURACY OR COMPLETENESS, TITLE, ANY EPIDEMIC FAILURE WARRANTY AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS.

TI SHALL NOT BE LIABLE FOR AND SHALL NOT DEFEND OR INDEMNIFY YOU AGAINST ANY CLAIM, INCLUDING BUT NOT LIMITED TO ANY INFRINGEMENT CLAIM THAT RELATES TO OR IS BASED ON ANY COMBINATION OF PRODUCTS EVEN IF DESCRIBED IN TI RESOURCES OR OTHERWISE. IN NO EVENT SHALL TI BE LIABLE FOR ANY ACTUAL, DIRECT, SPECIAL, COLLATERAL, INDIRECT, PUNITIVE, INCIDENTAL, CONSEQUENTIAL OR EXEMPLARY DAMAGES IN CONNECTION WITH OR ARISING OUT OF TI RESOURCES OR USE THEREOF, AND REGARDLESS OF WHETHER TI HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

You agree to fully indemnify TI and its representatives against any damages, costs, losses, and/or liabilities arising out of your non-compliance with the terms and provisions of this Notice.

This Notice applies to TI Resources. Additional terms apply to the use and purchase of certain types of materials, TI products and services. These include; without limitation, TI's standard terms for semiconductor products http://www.ti.com/sc/docs/stdterms.htm), evaluation modules, and samples (http://www.ti.com/sc/docs/sampterms.htm).

Mailing Address: Texas Instruments, Post Office Box 655303, Dallas, Texas 75265 Copyright © 2018, Texas Instruments Incorporated