🐺 Texas Instruments

## **BILL OF MATERIALS**

TI DESIGNS TIDA - 00221

City     Reference     Part Description     Manufacturer Part Number Part Nu		
2     C1, C7     CAP, CERM, 11F, 184, +21093, X7R, 0003     TDK     C1098X781C1098     0007       2     C2, C13     CAP, CERM, 0.1uf, 50Y, +7100, X7R, 0003     Kernet     C0003C104X7A2     0003       11     C3, C6, C13, C5, C4B, C5L, C32     CAP, CERM, 0.1uf, 23Y, +758, X7R, 0003     AVX     00033C104A17A     0003       0     C5, C6     CAP, CERM, 0.1uf, 23Y, +758, X7R, 0003     AVX     00033C104A17A     0003       0     C10, C12     CAP, CERM, 0.1uf, 25Y, +758, C007/NP0, 0603     AVX     00035A2104A17A     0003       2     C11, C13     CAP, CERM, 0.1uf, 25Y, +758, C007/NP0, 0603     AVX     00035A2104A17A     0003       1     C16, C12, C22, C23, C24     CAP, CERM, 0.1uf, 25Y, +758, C007/NP0, 0605     AVX     00035C135A17A     0003       1     C28, C26, C27, C24, C23, C24, C23, C24     CAP, CERM, 0.1uf, 25Y, +758, C067/NP0, 0605     MuRtan     D00     C004, C43     CAP, CERM, 0.1uf, 25Y, +758, X78, 0603     AVX     00033C104A17A     0005       2     C14, C12, R65, C56     CAP, CERM, 0.1uf, 25Y, +758, X78, 0603     AVX     00032C104A17A     0005       3     C11, C12, R65, C56	print 1	Note
2     C2, C3     CAP, CERM, 0.1uf, S0V, 4/19K, X7R, 0003     Kernet     C0003C104/K3ACU     0003       11     C3, C4, C14, C3, C5, C4, C5, C42     CAP, CERM, 0.1uf, 22V, 4/3K, X7R, 0603     AVX     00033C104/ATZ     0003       0     C5, C5, C4, C42, C43, C54, C54, C54, C54, C54, C54, C54, C54		
11     C3. C4, C42, C33, C45, C48, C51, C52, C33, C45, C5     CAP, CERM, 0.11, Z5V, -/ 5%, C0G/NP0, 0603     AVX     00033C104/ATZA     0003       0     C5, C5     CAP, CERM, 0.01, Z5V, -/ 5%, C0G/NP0, 0603     TXX     06033A101FA12A     0603       0     C63, C5, C1     CAP, CERM, 0.01, Z5V, -/ 5%, C0G/NP0, 0603     AVX     06033A101FA12A     0603       0     C10, C12     CAP, CERM, 0.11, Z5V, -/ 5%, C0G/NP0, 0603     AVX     06035A101FA12A     0605       2     C11, C15     CAP, TC4, A7, TX, SV, SV, 4/10%, SV, 0003     AVX     06035A10047A3     0603       1     C15, C19, C22, C23, C24, C24, C24, C24, C4P, CERM, 0.015, 59V, -/-10%, X7R, 0605     AVX     06055C155KA72A     0605       0     C40, C43, C34, C35, C37, C38, C37, C38, C47, C19V, -/ 10V, -/ 10W, X7R, 0605     AVX     06033C10417A7     0605       5     C44, C49, C50, C57, C56, C27, C30, C31, C49, C47, J10V, -/ 10V, X7R, 0603     AVX     06033C10417A7     0605       2     C46, C47     CAP, CERM, 0.17, J2V, -/ 10V, X7R, 0603     AVX     06033C10417A7     0605       2     C46, C47     CAP, CERM, 0.17, J2V, -/ 10V, X7R, 0603     MX     0003204975A12A     0605 <td>)</td> <td></td>	)	
11     CS3, CS4, CS7     CAY, CRM, DLP, JSY, -PSN, CRY, Du03     AXX     0033C101A1A     0003       0     CS, C5     CAY, CERM, D10F, JSY, -PSN, CRY, ND0, 0603     TDK     C10000051E1031     0663       0     CS, C5, C3     CAY, CERM, D11F, JSY, -PSN, CRY, ND0, 0603     AVX     06033A101A72A     0663       2     C11, C15     CAP, CERM, D1F, SOV, -FJN, C060400, 0603     AVX     06035A101A72A     0663       1     C17     CAP, CERM, D15F, SOV, -FJNK, C060400, 0603     AVX     06035C134A172A     0663       1     C17, C21, C22, C23, C24     CAP, CERM, D15F, SOV, -FJNK, C060400, 0605     AVX     06033C104A172A     0663       1     C25, C26, C21, C23, C23, C33, C33, C33, C34, C37, C33     CAP, CERM, D14F, JSV, -FSNK, C060400     AVX     06033C104A172A     0663       3     C41, C42, C66     RES 0.0 CHM, 174, JSV, -FSNK, C0633     MuRata     GRM2145C24701W01     0633C104A172A     0663       2     C46, C47     CAP, CERM, D14F, JSV, -FSNK, 778, 0603     MuRata     GRM2145C24701W01     0633C104A172A     0663       1     D3     LED, SMM, RLD, TH     V14m-VD1W     GRM2145C24701W01	)	
0     CB, CD, CLE     CAP, CERM, JORP, 500, -1/-30, CG/NP, 0633     AVX     963354101FA72A     0603       0     C10, C12     CAP, CERM, JDLP, 29, -5/3, XR, 0603     AVX     06033541201A72A     0603       2     C11, C15     CAP, CERM, 12p, 50, -1/-5%, C0G/NP0, 0603     AVX     06033541201A72A     0603       1     C17     C18, C19, C20, C21, C22, C22, C22, C22, C22, C22, C22	J	
0     C10, C12     CAP, CERM, J.Lip, SW, +/-5%, X78, 0603     AVX     060334.104A172A     0603       2     C11, C15     CAP, CERM, J.2p, SW, +/-5%, X78, 0603     AVX     060354.200A172A     0603       1     C12, C12, C22, C12, C22, C23, C24     CAP, TA, 4-TAP, SW, +/-10%, X78, 0805     AVX     080555.138A172A     0805       14     C25, C26, C27, C23, C33, C33, C38     CAP, CERM, 479F, SW, +/-5%, X78, 0603     MW Rola     GMX1ASC2F42M10010     0805       0     C40, C43     CAP, CERM, 479F, SW, +/-5%, X78, 0603     AVX     060332014A17A     0603       3     C41, C42, R66     RES 0.0 DHM 1/LWUMP GGB SMD     Vishay-Dale     CRCWG03000020EA     060320475KA17A     0603       2     C46, C47     CAP, CERM, 47, 10Y, +/-10%, X78, 0603     MUK 30     GRM388714474A120     0603       1     D3     LED SMM, RED, TH     VISHAY     TLRR405     LED SM       1     D3     LED SMM, RED, TH     VISHAY     TLRR405     LED SM       2     D1, D2     LED, SMM, RED, TH     VISHAY     TLRR4424     0603       1     D4     Diodes instrindo GRM38871		DNI
2     C11, C15     CAP, CERM, 12p, 500, -y-536, CG/MP0, 0603     AVX     06035A12UATZA     DBFS       1     C17     CAP, TA, 4, 7ur, 35V, -y-1096, 778, 0803     AVX     06055C13A12AATZA     08055       7     C18, C19, C20, C21, C22, C23, C24     CAP, CERM, 010, 54, 50V, -y-1096, 778, 0805     AVX     06055C13A4TZA     08055       14     C23, C34, C23, C36, C37, C38, C36, C37, C38     CAP, CERM, 014, F25V, -y-796, X78, 0803     AVX     06035C104ATZA     0805       0     C40, C43     CAP, CERM, 014, F25V, -y-796, X78, 0603     AVX     06032C104ATZA     0805       2     C44, C49, C50, C55, C56     CAP, CERM, 04, 70F, 25V, -y-1066, X5M0     Vishay-Dale     C6XCW065030000276     0603       2     D1, D2     LED, SMM, RED, TH     VISHAY     06032D475KAT2A     0603       1     D3     LE0 SmM, RED, TH     VISHAY     THR6405     LED, 55       1     D3     LED SMM, RED, TH     VISHAY     THR6405     LED, 55       1     D3     LED SMM, RED, TH     VISHAY     THR6405     LED, 55       1     D3     LED SMM, RED, TH     VISHAY		DNI
1     C17     CAP, TA, 47/e, 39/, 4/20%, 1.9 dbm, SMD     VIshay-purgue     2890475X9035CT13     0805.1       7     C18, C19, C20, C21, C22, C23, C24, C24, C24, C24, C24, C24, C24, C24		DNI
7     C18, C19, C20, C21, C22, C23, C24     CAP, CERM, 0.015µF, S0V, +/-10%, X7R, 0805     AVX     08055C133A4T2A     0805.1       14     C25, C26, C27, C28, C20, C31, C31, C33, C32, C32, C34, C43, C36, C37, C38     CAP, CERM, 0.10F, 25V, +/.5%, C7G, ORD, 0.805     MuRata     GRM21ASC24470JW01     0805.1       0     C40, C43     CAP, CERM, 0.10F, 25V, +/.5%, X7R, 0603     AVX     06033C104JAT2A     0603       3     C41, C42, R66     RES to OVM 3/12WU JMM0 6003 SMD     Vishay-Dale     CRCW000300020EA     0603       2     C46, C47     CAP, CERM, 0.47F, 25V, +/.10%, X7R, 0603     MWata     GRM28877L474K212     0605       2     D1, D2     LED, SMM, RED, TH     VISHAY     TLHR6405     LED, 5M       1     D3     LED, SMM, RED, TH     VISHAY     LED	,	
14     C25, C26, C27, C23, C39, C30, C31, C32, C33, C34, C35, C36, C37, C38     CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603     MuRata     GRM21/SC2E470/W01 D     0       3     CA1, C42, R66     RES 0.0 OHM 3/10W JUM 0603 SMD     Vishay-Dale     CRCW060300002DE 0     0603       5     C44, C43, C50, C55, C56     CAP, CERM, 0.1uF, 25V, +/-5%, X7R, 0603     AVX     06032300002DE 0     0603       2     C46, C47     CAP, CERM, 0.47uF, 15V, +/-10%, X7R, 0603     AVX     06032075KAT2A     0000       2     D1, D2     LED, SMM, RED, TH     VISHAY     TLHR6405     LED, SM       1     D3     LED SmartED Green S70NM     OSRAM     LG 129K-6211-242     LED, SM       1     D4     Diodes Sinching, 20V, 0.2a, SOT 23     Diodes Incorporated     MMX252280-7F     SOT-1       0     FB1, FB3     FERRITE BEAD, 42 OHM, 4A, D CR0.008 OHM, SMT 0805     TCA comporation     MMX1508102C     0605       1     J1     Header, TH, 200mil, T22V, 601d plated, 230 mil pbore insubitor     FC1     67997-424HLF     TSW-112-4       1     J2     Header, 782, 100mil spacing     FC1     67997-424HLF     HW212	28	
14     C32, C33, C34, C35, C36, C37, C38     CAP, CERM, 47pF, S007, 47-5%, CXF, N0603     AVX     06033       0     C40, C43, C43, C37, C38     CAP, CERM, 0.1uf, Z5V, 47-5%, X7R, 0603     AVX     06033C004L72A     0603       3     C41, C42, R66     RES 0.0 CHM 1/20V 1LWP 603 3MU     Vishay-Dale     CRCW060300002EA     0603       2     C46, C49, C55, C56     CAP, CERM, 0.47u, F3V, 47-10%, X7R, 0603     MuRata     060320075K472A     0606       2     D1, D2     LED, SMM, RBD, TH     VISHAY     TLHR6405     LED, 55       1     D3     LED SmartLED Green 570NM     OSRAM     LG L29K-62J1-24-2     LED060       1     D4     Diode, Switching, 200V, 0.2A, 507-23     Diodes Inc.     BA321-7-F     S071-7       0     FB1, FB3     FERRITE ECHP 1000 DHM 300MA 5003     TDK Corporation     MMZ1508B102C     0605       1     J1     Header, Male S-pin, 100mil spacing,     TE Connectivity     826926-5     HEADER       1     J2     Header, Male S-pin, 100mil spacing,     TC Connectivity     826926-5     HEADER       1     J3     Header, A22, 001 jlated, 230 mil	IV	
0     C40, C43     CAP, CERN, 0.10F, 25V, 4/-5%, X7R, 0603     AVX     06033C104JR7A     0603       3     C41, C42, R66     RES 0.0 OHM 1/10W JUMP 0603 SMD     Vishay-Dale     CRCW0603000020EA     0603       5     C44, C49, C65, C55, C56     CAP, CERM, 4.7 UF, 10V, 4/-10K, X5R, 0603     AVX     0603200475KR72A     0603       2     C46, C47     CAP, CERM, 0.47 UF, 25V, 4/-10%, X5R, 0603     MuRata     GRM188871E474KA121     0600       1     D3     LED SmartLED Green 570NM     OSRAM     LG 129K 6211-24-2     LED060       1     D4     Diode, Switching, 200V, 0.2A, 507-23     Diodes inc.     B8321-7-F     Sof1-1       0     F81, F83     FERRITE EAD, 20 CM, 4.0 CR0.003 0HM, SMT     TAVO YUDEN     FBMI2125H420-T     0605       1     JF82     FERRITE EAD, 20 CM, 4.0 CR0.003 0HM, SMT     TAVO YUDEN     FBMI2125H420-T     0605       1     J1     Header, Male 5-pin, 100mil spacing,     TE Connectivity     82526-5     HEADER       1     J2     Header, Male 2-scipin, 100mil spacing,     FCI     67997-424HLF     TSW-1124       1     J3     Head	١V	
3     C41, C42, R66     RES 0.0 CHM /1/0W JUMP 6003 SMD     Vishay-Dale     CRCW6063000026FA     0603       5     C44, C49, C50, C55, C56     CAP, CERM, 4, 7UF, 10V, +/ 10%, X5R, 6603     AVX     66032D475KA12A     0603       2     C46, C47     CAP, CERM, 0, 47UF, 30V, +/ 10%, X5R, 6603     MuRata     GRM18871E474KA12J     0603       2     D1, D2     LED, SMM, RED, TH     VISHAV     TLHR6405     LED, 55       1     D3     LED SmartLED Green 570NM     OSRAM     LG 129K-6211-24-2     LED060       1     D4     Diode, Switching, 200V, 0, 2A, SOT-23     Diodes Inc.     BA521-7-F     SOT-21       0     FB1, FB3     FERRITE BEAD, 42 OHM, 4 A, DCR0.008 OHM, SMT     Diodes Inc.     BA521-7-F     SOT-20       1     J1     Header, Male 5-pin, 100mil spacing,     TE Connectivity     RES02525     HEADER       1     J2     Header, Male 2A5-pin, 100mil spacing,     FC Connectivity     RE997-424HLF     TSW-1124       1     J3     Header, Male 2A5-pin, 100mil spacing,     FC Connectivity     RE997-424HLF     TSW-1124       1     J2     Header, Male		DNI
5     C44, C49, C50, C55, C56     CAP, CERM, 4.7uf, 10V, +/ 10%, X5R, 0603     AVX     06032D475KAT2A     0603       2     C46, C47     CAP, CERM, 0.47uF, 25V, +/ -10%, X7R, 0603     MuRata     GRM188R71E474KA12J     0603       2     D1, D2     LED, SMM, RED, TH     VISHAY     TLH66405     LED, S5       1     D3     LED SmartLED Green 570MM     OSRAM     LG 129K 621: 24-2     LED060       1     D4     Diode, Switching, 200V, 0.2A, SOT-23     Diodes incorporated     MMS23288-7-F     Sod-11       0     FB1, FB3     FERRITE BED, 24 CMM 4A, OCR0.008 OHM, SMT- 0805     TAMO VUDEN     FBMI2125H5420-T     0805       1     IF2     FERRITE CHP 1000 OHM 300MA 0603     TDK Corporation     MMZ108B102C     0603       1     J1     Header, Male 5pin, 100mil spacing, I     TEC connectivity     826926-5     HEADER       1     J2     Header, Male 2x5-pin, 100mil spacing     FCL     67997-410HLF     TSW-112-4       1     J3     Header, Xa2, 100mil, 12x2, Gold plated, 230 mil above insulator     FCL     67997-410HLF     HWR12       1     J3     Header		
2     C46, C47     CAP, CERM, D.47uF, 25Y, +/-10%, X7R, 0603     MuRata     GRM188R71E474KA12J     0602       2     D1, D2     LED, SMM, RED, TH     VISHAY     TLHR6405     LED, SM       1     D3     LED, SMM, RED, TH     VISHAY     TLHR6405     LED, SM       1     D4     Diode, Switching, 200V, 0.2A, SOT-23     Diodes Inc.     BA521-7F     SOT-2       1     D5     DIODZ ZENER 3, 9V S00MW SOD123     Diodes Inc.orporated     MMS25228F-7F     Sod17       0     FB1, FB3     FERRITE BRAD, 42 OHM, 4 A, DCR0.008 OHM, SMT 0805     TANO YUDEN     FBMJ2125HS420-T     0805       1     J1     Header, Male 5-pin, 1000 HM 300MA 0603     TDK Corporation     MMZ1608B102C     0602       1     J2     Header, Male 5-pin, 100mil Typacing     FCI     67997-424HLF     TSW-1124       1     J3     Header, 82, 200mil, TH     FCI     67997-410HLF     HBADE       1     J4     Header, 7x2, 100mil spacing     FCI     67997-410HLF     HBADE       1     J3     Header, 7x2, 100mil spacing     FCI     67997-40HLF     HDR2 <td></td> <td></td>		
1     D3     LED SmartLED Green 570NM     OSRAM     LG L29K-G211-24-Z     LED060       1     D4     Diode, Switching, 200V, 0.2A, SOT-23     Diodes Incc.     BA521-7-F     SOT-21       1     D5     DIODC ZENER 39V SOMW SOD123     Diodes Inccroproted     MMS252288-7-F     SOT-21       0     FB1, FB3     FERRITE BEAD, 42 OHM, 4 A, DCR0.008 OHM, SMT- 0805     TAIYO YUDEN     FBMI2125H5420-T     0805_       1     FB2     FERRITE CHIP 1000 OHM 300MA 0603     TDK Corporation     MMZ16088102C     0600       1     J1     Header, FMale 5-pin, 100mil spacing.     TE Connectivity     826926-5     HEADER       1     J2     Header, TH, 100mil, 12x2, Gold plated, 230 mil above insulator     FCI     67997-424HLF     TSW-112-C       1     J3     Header, 82, 100mil, TH     FCI     67997-416HLF     TSW-112-C       1     J4     Header, 7x2, pi0, 100mil spacing     FCI     67997-404HLF     HDR2       1     J5     3 pin berger     FCI     67997-404HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology </td <td></td> <td></td>		
1     D3     LED SmartLED Green 570NM     OSRAM     LG L29K-G211-24-Z     LED060       1     D4     Diode, Switching, 200V, 0.2A, SOT-23     Diodes Incc.     BA521-7-F     SOT-7       1     D5     DIODC ZENER 3.9V SOMW SOD123     Diodes Inccroproted     MMS252288-7-F     SOT-7       0     FB1, FB3     FERRITE BEAD, 42 OHM, 4 A, DCR0.008 OHM, SMT. 0805     TAIYO YUDEN     FBMJ2125H5420-T     0805_       1     FB2     FERRITE CHIP 1000 OHM 300MA 0603     TDK Corporation     MMZ16088102C     0600       1     J1     Header, TH, 100mil spacing.     TE Connectivity     826926-5     HEADER       1     J2     Header, TH, 100mil 12x2, Gold plated, 230 mil above insulator     FCI     67997-424HLF     TSW-112-C       1     J3     Header, RA2, 100mil spacing     FCI     67997-416HLF     FSW-124-C       1     J4     Header, Xa2, pin, 100mil spacing     FCI     67997-40HLF     HDR2       1     J5     3 pin berger     FCI     67997-40HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology	454	
1     D4     Diode, Switching, 200V, 0.2A, SOT-23     Diodes Inc.     BAS21-7-F     SOT-2       1     D5     DIODE ZNER 3.9V SODWW SOD123     Diodes Inc.     BAS21-7-F     sod-11       0     FB1, FB3     FERRITE BEAD, 42 OHM, 4A, DCR0.008 OHM, SMT- 0805     TAIVO YUDEN     FBMJ2125H5420-T     0805       1     FB2     FERRITE CHIP 1000 OHM 300MA 0603     TDK Corporation     MMZ1603B102C     0600       1     J1     Header, Male 5-pin, 100mil spacing, 1     TE Connectivity     82562-5     HEADER       1     J2     Header, Male 2x5-pin, 100mil spacing, 1     TEC     67997-424HLF     TSW-112-C       1     J3     Header, Male 2x5-pin, 100mil spacing, 1     FCI     67997-404HLF     HDR2       1     J4     Header, X2-pin, 100mil spacing, 1     FCI     67997-404HLF     HDR2       1     J6     Header, 7x2, 100mil, SMT     On-Shore Technology     ED120/2DS     CONN_ED1 RB       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     RB       3     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH		
1     D5     DIODE ZENER 3.9V 500MW SDD123     Diodes Incorporated     MMSZ52288-7-F     sod 12       0     FB1, FB3     FERNTE BEAD, 42 OHM, 4 A, DCR008 OHM, SMT- 0805     TAIYO YUDEN     FBMJ2125HS420-T     0805_       1     FB2     FERRITE CHIP 1000 OHM 300MA 0603     TDK Corporation     MMZ16088102C     0605       1     J1     Header, Male 5-pin, 100mil spacing, above insulator     TE Connectivity     826926-5     HEADER       1     J2     Header, TH, 100mil, 12x2, Gold plated, 230 mil above insulator     FCI     67997-424HLF     TSW-112-C       1     J3     Header, Male 2x5-pin, 100mil spacing     FCI     67997-410HLF     HBR2       1     J4     Header, Xa2-pin, 100mil spacing     FCI     67997-404HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     SM_N2514 R8       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2		
0     FB1, FB3     FERRITE BEAD, 42 OHM, 4 A, DCR0.008 OHM, SMT 0805     TAIVO YUDEN     FBMJ2125HS420-T     0805_       1     FB2     FERRITE CHIP 1000 OHM 300MA 0603     TDK Corporation     MM21608B102C     0605_       1     J1     Header, Male 5-pin, 100mil spacing, Header, Xale 5-pin, 100mil spacing,     TE Connectivity     826926-5     HEADER       1     J2     Header, Xale 5-pin, 100mil spacing, Header, Xale 2X5-pin, 100mil spacing     FCI     67997-424HLF     TSW-112-C       1     J3     Header, Male 2X5-pin, 100mil spacing     FCI     67997-416HLF     HDR2       1     J5     3 pin berger     FCI     67997-404HLF     HDR2       1     J5     Header, Xa-pin, 100mil spacing     FCI     67997-404HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CON_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     3M_N2514 RB       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CON_ED1       2		
Image: Construction		DNI
1     J1     Header, Male 5-pin, 100mil spacing, medder, TH, 100mil, 12x2, Gold plated, 230 mil above insulator     TE Connectivity     826926-5     HEADER       1     J2     Header, TH, 100mil, 12x2, Gold plated, 230 mil above insulator     FCI     67997-424HLF     TSW-112-C       1     J3     Header, 8x2, 100mil, TH     FCI     67997-416HLF     TSW-108-C       1     J4     Header, Xa2, 100mil, TH     FCI     67997-416HLF     HDR2       1     J5     3 pin berger     FCI     68001-403HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     3M_N2514       1     J8     Header, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060300RINEA     0603       4     R5, R13, R17     RES 100 ohm		
1     J2     Header, TH, 100mil, 12x2, Gold plated, 230 mil above insulator     FCI     67997-424HLF     TSW-112-0       1     J3     Header, 8x2, 100mil, TH     FCI     67997-416HLF     TSW-108-0       1     J4     Header, 8x2, 100mil, TH     FCI     67997-410HLF     HDR12       1     J5     3 pin berger     FCI     68001-403HLF     HDR12       1     J6     Header, 2x2-pin, 100mil spacing     FCI     67997-404HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     3M_N2514 RB       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       3     R3, R4, R16     RES, 300 hm, 5%, 0.1W, 0603		
1     J2     above insulator     FCI     6 /99 / 424HLF     ISW-112-4       1     J3     Header, 8x2, 100mil, TH     FCI     67997-416HLF     TSW-108-6       1     J4     Header, Male 2x5-pin, 100mil spacing     FCI     67997-410HLF     HDR2;       1     J5     3 pin berger     FCI     68001-403HLF     HDR2;       1     J6     Header, 2x2-pin, 100mil spacing     FCI     67997-404HLF     HDR2;       0     J7     TERMINAL BLOCK S.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     RR       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       3     R3, R4, R16     RES, 200 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060310R/NEA     0603       4     R5, R8, R13, R17     RES 100 Ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603	_5P	
1     14     Header, Male 2x5-pin, 100mil spacing     FCI     67997-410HLF     HDR22       1     J5     3 pin berger     FCI     68001-403HLF     HDR13       1     J6     Header, 2x2-pin, 100mil spacing     FCI     67997-404HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     3M_N2514 RB       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       3     R3, R4, R16     RES, 2.2k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060320RJNEA     0603       4     R5, R8, R13, R17     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW0603100RJNEA     0603       0     R6, R7, R22, R29     RES 30K OHM 1/	17-G-D	
1     J5     3 pin berger     FCI     68001-403HLF     HDR12       1     J6     Header, 2x2-pin, 100mil spacing     FCI     67997-404HLF     HDR2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     3M_N2514 RB       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       3     R3, R4, R16     RES, 2.2k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060330KNIEA     0603       4     R5, R8, R13, R17     RES 100 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW0603300RNIEA     0603       0     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW060330KNIEA     0603       0     R10, R91     RES 200k	)7-G-D	
1     16     Header, 2x2-pin, 100mil spacing     FCI     67997-404HLF     HDR_2       0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     3M_N2514 RB       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1 2       6     R1, R2, R62, R63, R68, R69     RES, 2.2k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW06032K20JNEA     0603       3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060330RJNEA     0603       0     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603300RJNEA     0603       0     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       0     R11, R12     RES 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW060330KKEA     0603       0	(5	
0     J7     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       1     J8     Header, 7x2, 100mil, SMT     Molex     N2514-6002-RB     3M_N2514 RB       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1 2       6     R1, R2, R62, R63, R68, R69     RES, 2.2k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW06032K20JNEA     0603       3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060310RJNEA     0603       4     R5, R8, R13, R17     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW0603100RJNEA     0603       0     R6, R7, R22, R29     RES 300 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603300RJNEA     0603       0     R9, R92     RES 300 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       0     R11, R12     RES 300 OHM 1/10W 1% 0603 SMD     Vishay-Dale     CRCW0603200KFKEA     0603	(3	
Image: Constraint of the second sec	X2	
1     J8     Header, X2, 100mil, SM1     Molex     N2514-6002-RB     RB       8     J9, J10, J11, J12, J13, J14, J15, J16     TERMINAL BLOCK 5.08MM VERT 2POS, TH     On-Shore Technology     ED120/2DS     CONN_ED1       2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1       6     R1, R2, R62, R63, R68, R69     RES, 2.2k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW06032K20JNEA     0603       3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060310K0JNEA     0603       4     R5, R8, R13, R17     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW0603100KFKEA     0603       0     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW060300KFKEA     0603       0     R9, R92     RES 300K OHM 1/10W 1% 0603 SMD     Vishay-Dale     CRCW060300KFKEA     0603       0     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW060320KFKEA     0603       0     R11, R12     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0	20-2DS	DNI
2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD17571Q2     SON_CSD1 2       6     R1, R2, R62, R63, R68, R69     RES, 2.2k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW06032K20JNEA     0603       3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW0603300RJNEA     0603       4     R5, R8, R13, R17     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603       0     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100RFKEA     0603       0     R9, R92     RES 390K OHM 1/10W 1% 0603 SMD     Vishay-Dale     CRCW0603200KFKEA     0603       0     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       0     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW0603100KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603 <t< td=""><td>-6002-</td><td></td></t<>	-6002-	
2     Q1, Q2     MOSFET, N-CH, 30V, 22A, SON 2X2 MM     TEXAS INSTRUMENTS     CSD1/5/1Q2     2       6     R1, R2, R62, R63, R68, R69     RES, 2.2k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW06032K20JNEA     0603       3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW0603300RJNEA     0603       4     R5, R8, R13, R17     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603       0     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100RFKEA     0603       0     R9, R92     RES 390K OHM 1/10W 1% 0603 SMD     Vishay-Dale     CRCW0603300KFKEA     0603       0     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       0     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW0603100KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW060310KFKEA     0603       1	20-2DS	
3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW0603300RJNEA     0603       4     R5, R8, R13, R17     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603       0     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100RFKEA     0603       0     R9, R92     RES 390K OHM 1/10W 1% 0603     Vishay-Dale     CRCW0603300KFKEA     0603       0     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       0     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW0603100KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW060332KFKEA     0603       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23,	7571Q	
3     R3, R4, R16     RES, 300 ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW0603300RJNEA     0603       4     R5, R8, R13, R17     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603       0     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100RFKEA     0603       0     R9, R92     RES 390K OHM 1/10W 1% 0603 SMD     Vishay-Dale     CRCW0603300KFKEA     0603       0     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       0     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW0603100KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW060347K0JNEA     0603       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060310K0JNEA     0603       0	,	
O     R6, R7, R22, R29     RES, 100 ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100RFKEA     0603       O     R9, R92     RES 390K OHM 1/10W 1% 0603 SMD     Vishay Dale     CRCW0603390KFKEA     0603       O     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       O     R11, R12     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       O     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW0603100KFKEA     0805_       O     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       O     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW0603100KFKEA     0603       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603		
0     R9, R92     RES 390K OHM 1/10W 1% 0603 SMD     Vishay Dale     CRCW0603390KFKEA     0603       0     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       0     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW0603200KFKEA     0603       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW060347K0JNEA     0603       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW0603100KJNEA     0603	,	
O     R10, R91     RES, 200k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603200KFKEA     0603       O     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW08052K40FKEA     0805_       O     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       O     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW0805332KFKEA     0805_       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603		DNI
0     R11, R12     RES 2.40K OHM 1/8W 1% 0805 SMD     Vishay-Dale     CRCW08052K40FKEA     0805_       0     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       0     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW0805332KFKEA     0805_       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603		DNI
O     R14, R15, R18, R19     RES, 100k ohm, 1%, 0.1W, 0603     Vishay-Dale     CRCW0603100KFKEA     0603       O     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW0805332KFKEA     0805_1       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603		DNI
0     R20, R25, R27, R28     RES, 332k ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW0805332KFKEA     0805_1       1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603	nv	DNI
1     R21     RES, 47k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW060347K0JNEA     0603       0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603		DNI
0     R23, R24     RES 10K OHM 1/10W 5% 0603 SMD     Vishay-Dale     CRCW060310K0JNEA     0603	IV	DNI
	,	
0 R26 RES. 30k ohm. 5%. 0.1W. 0603 Vishav-Dale CRCW060330K0INFA 0603		DNI
		DNI
0 R30 RES, 470 ohm, 5%, 0.1W, 0603 Vishay-Dale CRCW0603470RJNEA 0603		DNI
0 R31 RES, 10.0k ohm, 1%, 0.1W, 0603 Vishay-Dale CRCW060310K0FKEA 0603	,	DNI
0 R32 RES 1.00M OHM 1/10W 1% 0603 SMD Vishay-Dale CRCW06031M00FKEA 0603		DNI
14     R33, R34, R35, R36, R37, R38, R39, R40, R42, R43, R44, R45, R46, R47     RES, 1.0k ohm, 5%, 0.1W, 0603     Vishay-Dale     CRCW06031K00JNEA     0603		
0     R41     RES, 0 ohm, 5%, 0.125W, 0805     Vishay-Dale     CRCW08050000Z0EA     0805_1	١V	DNI
0     R48, R49, R50, R51, R52, R53, R55     RES, 13.0 ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW080513R0FKEA     0805_1		DNI
7     R54, R56, R57, R58, R59, R60, R61     RES, 13.0 ohm, 1%, 0.125W, 0805     Vishay-Dale     CRCW080513R0FKEA     0805_1		

Qty	Reference	Part Description	Manufacturer	Manufacturer Part Number	PCB Footprint	Note
0	R64, R65, R67	RES 560K OHM 1/10W 1% 0603 SMD	Vishay-Dale	CRCW0603560KFKEA	0603	DNI
20	R70, R71, R73, R74, R75, R76, R77, R78, R79, R80, R81, R82, R83, R84, R85, R86, R87, R88, R89, R90	RES, 0 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW08050000Z0EA	0805_HV	
1	R72	RES, 10 ohm, 5%, 0.125W, 0805	Vishay-Dale	CRCW080510R0JNEA	0805_HV	
1	S1	Switch, Tactile, SPST-NO, 0.1A, 16V, SMT	Bourns	7914G-1-000E	SW_7914G-1- 000E	
1	U1	IC, 300-mA 40-V LOW-DROPOUT REGULATOR WITH 25-uA QUIESCENT CURRENT	Texas Instruments	TPS7A6533QKVURQ1	KVU_1	
0	U2	LOW-VOLTAGE RAIL-TO-RAIL OUTPUT OPERATIONAL AMPLIFIERS, PW0014A	Texas Instruments	OPA4314AIPW	PW0014A_N	DNI
1	U3	IC, MCU 16BIT 512KB FLASH, LQFP-128	Texas Instruments	MSP430F6779IPEU	QFP50P1600X220 0X160-128N	
0	U4	IC, Micropower Shunt Voltage Reference 100 ppm/°C, 45μA-12mA, Adjustable	Texas Instruments	LM4041BIDBZ	SOT-23	DNI
1	Y1	CRYSTAL, 32.768KHz, 6PF, +/- 20PPM, SMD-3P	CITIZEN	CMR200T-32.768KDZBT	XTAL_CMR200T	

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