

TITLE: Bill of Materials

DATE: 07/27/2017

DESIGN: maxrefdes145_apps_c

| ITEM | QTY | REF DES | Var Status | MAXINV | MFG PART # | MANUFACTU |
|------|-----|------------------|------------|--------------------------|--------------|-----------|
| 1 | 1 | C1 | Pref | 20-00U01-BAC1005X7R1V | TDK | |
| 2 | 14 | C2, C7, C9, C10 | Pref | 20-000U1-31 C0402C104J4 | KEMET | |
| 3 | 1 | C3 | Pref | 20-0001U-B8 C0402C105K1 | KEMET | |
| 4 | 1 | C4 | Pref | 20-0010U-16 C1608X5R1A | TDK | |
| 5 | 3 | C5, C6, C8 | Pref | 20-004U7-16 C0603C475K1 | KEMET; TAIYO | |
| 6 | 4 | C10, C20, C30 | Pref | 20-000U1-10 C0603C104K1 | KEMET | |
| 7 | 12 | C11-C13, C21 | Pref | 20-0001U-Z6 GMK107BJ1C | TAIYO YUDEM | |
| 8 | 8 | C14, C19, C20 | Pref | 20-0001U-T2 C2012X7S2A | TDK/MURATA | |
| 9 | 24 | C15-C18, C25 | Pref | 20-0270P-E4 VJ0603A271F | VISHAY VITRO | |
| 10 | 5 | C50, C52, C53 | Pref | 20-000U1-16 C1005X5R1A | TDK; TAIYO Y | |
| 11 | 6 | C51, C53, C54 | Pref | 20-0001U-A2 EMK107BJ10 | TAIYO YUDEM | |
| 12 | 2 | C57, C69 | Pref | 20-002U2-16 ZRB157R61A | MURATA | |
| 13 | 1 | C60 | Pref | 20-004U7-A3 GRM188F51F | MURATA | |
| 14 | 1 | C61 | Pref | 20-00U01-I6 0201ZC103K1 | AVX; TDK; MI | |
| 15 | 1 | C63 | Pref | 20-000U1-H9 GRM033R61F | MURATA/TAI | |
| 16 | 1 | C65 | Pref | 20-0001U-B9 GRM188R60 | MURATA | |
| 17 | 1 | C66 | Pref | 20-0001U-08 GRM31CR72 | MURATA/TD | |
| 18 | 1 | C68 | Pref | 20-0010U-T2 C5750X7S2A | TDK | |
| 19 | 2 | C71, C72 | Pref | 20-0018P-27 C0402C180J5 | KEMET/MUR | |
| 20 | 1 | C124 | Pref | 20-0010U-A5 GRM31CR70 | MURATA | |
| 21 | 1 | D2 | Pref | 30-B18013F-B180-13-F | DIODES INCC | |
| 22 | 1 | DS1 | Pref | 30-LGL29KG2 LG L29K-G2J1 | OSRAM | |
| 23 | 1 | F1 | Pref | 40-6.3A75VF.0458-06.3 | LITTELFUSE | |
| 24 | 1 | J1 | Pref | 01-USB1HSI USB-B1HSB6 | ON-SHORE TI | |
| 25 | 8 | J11, J12, J21 | Pref | 00-SAMPLE-C12FS4000-PG | HIGH TECT PI | |
| 26 | 1 | JTAG | Pref | 01-FTS10501 FTS-105-01-L | SAMTEC | |
| 27 | 2 | L1, L2 | Pref | 50-00600-SM BLM21AG60 | MURATA | |
| 28 | 1 | L3 | Pref | 50-0047U-S2 LPS4018-473 | COILCRAFT | |
| 29 | 18 | LED1, LED2, LED3 | Pref | 30-SMLP12P SML-P12PT | ROHM | |
| 30 | 20 | LED12, LED14 | Pref | 30-SMLP12U SML-P12UT | ROHM | |
| 31 | 1 | P1 | Pref | 01-PJ202AH3 PJ-202AH | CUI INC. | |
| 32 | 16 | Q11-Q14, Q2 | Pref | 90-NTTFS511 NTTFS5116 | PION SEMICON | |
| 33 | 2 | R1, R2 | Pref | 80-0010R-18 ERJ-2RKF10R | PANASONIC | |
| 34 | 8 | R3, R57, R58 | Pref | 80-0010K-24 CRCW06031C | VISHAY DALE | |
| 35 | 1 | R4 | Pref | 80-0015K-24 CRCW06031F | VISHAY DALE | |

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|----|-----------------------|--------------------------------------|
| 36 | 21 R5, R52, R54, Pref | 80-0010K-23 CRCW04021(VISHAY DALE |
| 37 | 1 R6 Pref | 80-002K2-23 CRCW04022(VISHAY DALE |
| 38 | 1 R7 Pref | 80-0012K-24 CRCW06031(VISHAY DALE |
| 39 | 1 R8 Pref | 80-004K7-19 CRCW06034(VISHAY DALE |
| 40 | 2 R11, R12 Pref | 80-04K99-23 CRCW04024(VISHAY DALE |
| 41 | 29 R20, R115-R1Pref | 80-0820R-23 CRCW04028(VISHAY DALE |
| 42 | 9 R21, R120, R: Pref | 80-006K8-25 CRCW08056(VISHAY DALE |
| 43 | 1 R51 Pref | 80-0001K-18 ERJ-2RKF100 PANASONIC |
| 44 | 6 R59-R64 Pref | 80-0100R-24 CRCW06031(VISHAY DALE |
| 45 | 1 R70 Pref | 80-0010K-AA ERJ-1GNJ103 PANASONIC |
| 46 | 4 R72-R75 Pref | 80-0000R-27 RC1608J000(SAMSUNG EL |
| 47 | 8 R101, R102, IPref | 80-0R012-AA LRC-LRF1206 TT ELECTRON |
| 48 | 8 R110, R111, IPref | 80-0000R-26 RC0402JR-07 YAGEO PHYC |
| 49 | 16 R130-R133, F Pref | 80-0100R-49 CR0402-JW-1 BOURNS |
| 50 | 3 R213, R313, IPref | 80-0001K-C3 RCC-0402PW INTERNATIONAL |
| 51 | 4 TP1, TP2, TP5 Pref | 02-TPCOMP5 5020 KEYSTONE |
| 52 | 24 TVS11-TVS16 Pref | 30-SMCJ48A-SMCJ48A ST MICROELE |
| 53 | 1 TVS17 Pref | 30-SM30T47, SM30T47AY ST MICROELE |
| 54 | 1 TVS18 Pref | 30-SM30T35, SM30T35AY ST MICROELE |
| 55 | 1 U1 Pref | 10-93LC66BT 93LC66BT-I/(MICROCHIP |
| 56 | 1 U2 Pref | 10-24LC128T 24LC128T-E/(MICROCHIP |
| 57 | 1 U5 Pref | 10-MAX1500 MAX15006A/ MAXIM |
| 58 | 4 U10, U20, U3 Pref | 00-SAMPLE-C MAX14819A/ MAXIM |
| 59 | 1 U50 Pref | 10-STM32F4(STM32F405R ST MICROELE |
| 60 | 1 U51 Pref | 10-FT2232HC FT2232HQ FUTURE TECH |
| 61 | 1 U52 Pref | 10-MAX1493 MAX14931F/ MAXIM |
| 62 | 1 U53 Pref | 00-SAMPLE-C MAX12931B/ MAXIM |
| 63 | 1 U54 Pref | 10-MAX1506 MAX15062A/ MAXIM |
| 64 | 1 Y1 Pref | 60-0012M-1(ABM7-12.00(ABRACON |
| 65 | 1 Y2 Pref | 60-14M75-0(MJ-14.74560 MERCURY EL |
| 66 | 1 PCB - | N/A MAXREFDES1 MAXIM |

TOTAL 328

DO NOT PURCHASE(DNP)

| ITEM | QTY | REF DES | Var Status | MAXINV | MFG PART # | MANUFACTU |
|------|-----|---------------|------------|-------------|-------------------------|-----------|
| 1 | 1 | C64 | DNP | 20-00U01-I6 | 0201ZC103K/AVX; TDK; MI | |
| 2 | 1 | D1 | DNP | 30-SM30T47 | SM30T47CA/ST MICROELE | |
| 3 | 1 | J2 | DNP | 01-10501700 | 105017-0001 MOLEX | |
| 4 | 1 | J3 | DNP | 01-96110664 | 961106-64043M | |
| 5 | 3 | R53, R55, R7 | DNP | 80-0001K-18 | ERJ-2RKF100 PANASONIC | |
| 6 | 4 | R107, R207, I | DNP | 80-0000R-26 | RC0402JR-07 YAGEO PHYC | |
| 7 | 2 | R140, R141 | DNP | 80-0010R-18 | ERJ-2RKF10R PANASONIC | |

| | | | | |
|-------|---|------|-----|--------------------------------|
| | 8 | 1 Y4 | DNP | 60-0050M-21ASE-50.000V ABRACON |
| TOTAL | | 14 | | |

PACKOUT (These are purchased parts but not assembled on PCB and will be shipped with PCB)

| ITEM | QTY | REF DES | Var Status | MAXINV | MFG PART # | MANUFACTU |
|-------|-----|---------|------------|--------|------------|-----------|
| TOTAL | | 0 | | | | |

| VALUE | DESCRIPTION | COMMENTS |
|--------------|---------------|----------|
| 0.01UF | CAPACITOR; : | |
| 0.1UF | CAPACITOR; : | |
| 1UF | CAPACITOR; : | |
| 10UF | CAPACITOR; : | |
| 4.7UF | CAPACITOR; : | |
| 0.1UF | CAPACITOR; : | |
| 1.0UF | CAPACITOR; : | |
| 1UF | CAPACITOR; : | |
| 270PF | CAPACITOR; : | |
| 0.1UF | CAPACITOR; : | |
| 1UF | CAPACITOR; : | |
| 2.2UF | CAPACITOR; : | |
| 4.7UF | CAPACITOR; : | |
| 0.01UF | CAPACITOR; : | |
| 0.1UF | CAPACITOR; : | |
| 1UF | CAPACITOR; : | |
| 1UF | CAPACITOR; : | |
| 10UF | CAPACITOR; : | |
| 18PF | CAPACITOR; : | |
| 10UF | CAPACITOR; : | |
| B180-13-F | DIODE; SCH; | |
| LG L29K-G2J1 | DIODE; LED; : | |
| 6.3A | FUSE; SMT (1 | |
| USB-B1HSB6 | CONNECTOR | |
| 12FS4000-PG | CONNECTOR | |
| FTS-105-01-L | CONNECTOR | |
| 600 | INDUCTOR; S | |
| 47UH | INDUCTOR; M | |
| SML-P12PT | DIODE; LED; : | |
| SML-P12UT | DIODE; LED; : | |
| PJ-202AH | CONNECTOR | |
| NTTFS5116P | TRAN; POWE | |
| 10 | RESISTOR; 04 | |
| 10K | RESISTOR; 06 | |
| 15K | RESISTOR, 06 | |

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|--------------|--------------------|---|
| 10K | RESISTOR; 04 | |
| 2.2K | RESISTOR, 04 | |
| 12K | RESISTOR, 06 | |
| 4.7K | RESISTOR; 06 | |
| 4.99K | RESISTOR; 04 | |
| | 820 RESISTOR, 04 | |
| 6.8K | RESISTOR; 08 | |
| 1K | RESISTOR; 04 | |
| | 100 RESISTOR; 06 | |
| 10K | RESISTOR; 02 | |
| | 0 RESISTOR; 06 | |
| | 0.012 RESISTOR; 12 | |
| | 0 RESISTOR; 04 | |
| | 100 RESISTOR; 04 | |
| 1K | RESISTOR; 04 | |
| N/A | TEST POINT; | |
| 48V | DIODE; TVS; : | |
| 46.7V | DIODE; TVS; : | |
| 35V | DIODE; TVS; : | |
| 93LC66BT-I/C | IC; EPROM; 4 | |
| 24LC128T-E/I | IC; EPROM; 1 | |
| MAX15006A/I | IC; VREG; UL | |
| MAX14819A | EVKIT PART-I | |
| STM32F405R | IC; UCON; AR | |
| FT2232HQ | IC; MMR; DI | |
| MAX14931F | IC; DISO; 3/1 | |
| MAX12931B | EVKIT PART - | |
| MAX15062A | IC; CONV; UL | |
| 12MHZ | CRYSTAL; SM | |
| 14.7456MHZ | CRYSTAL; SM | |
| PCB | PCB:MAXREF- | - |

| VALUE | DESCRIPTION | COMMENTS |
|-------------|-----------------|----------|
| 0.01UF | CAPACITOR; : | |
| 46.7V | DIODE; TVS; : | |
| 105017-0001 | CONNECTOR | |
| 961106-6404 | CONNECTOR | |
| 1K | RESISTOR; 04 | |
| | 0 RESISTOR; 04 | |
| | 10 RESISTOR; 04 | |

50MHZ OSCILLATOR;

ed with PCB)

VALUE DESCRIPTION COMMENTS