DIGITAL RGB CLOCK

W.E.NICKLES Rev 1.0 6/25/2016

LEILANI ELECTRONICS

U1 PIC16F819 — MCLR, INT, RA1, RA4, RA6, RA7, RB7, RA0, RA3, RB1, RB2, RB3, RB4, RB5, RB6, RA2, VDD, VSS

U2, U3, U4, U5, U6 STP08DP05 — SDI, CLK, LE, REXT, OE, GND, OUT0–OUT6, SDO

U7, U8, U9 AP2192 — OUT1, OUT2, IN, FLG2, FLG1, GND, EN1, EN2

U10, U11, U12, U13, U14, U15 AD-121F2 — +V, RA RB RC RD RE RF RG GA GB GC GD GE GF GG BA BB BC BD BE BF BG

U16 RECOM — VOUT, VIN, GND

U17 DS1302 — SDI, SCLK, CE, VCC2, GND, VCC1, X1, X2

D1 PMEG3010, D2 PMEG3010, D3–D9 IN4148, D10–D13 IN4148, L1–L4 CLVBAFKA

R1 10K, R2 10K, R3 10K, R4 800, R5 800, R6 1K, R7 1K, R8 800, R9 1K, R10 1K

C1 0.1, C2 0.1uF, C3 0.1uF, C4 1uF, C5 1uF, C6 1uF, C7 0.1uF, C8 0.1uF, C9 0.1uF, C10 0.1uF, C11 10uF, C12 10uF, C13 1uF, C14 1F

B1 TIME, B2 RST, B3 RGB

32,768K

+3.3V, +9V