DC Input and Regulator LED Drivers and Clock Arms Real-time Clock Module DCIN $1k\Omega$ VDC IC2 TLC5971_SOP COINCELL L/W/---o\(\frac{1}{2}\) ARMO ARMO LED3 MO 32kHz 5V - 12V DC Input LED4 SO INT/SQW OUTR0 OUTGO 20 VREG OUTB0 560Ω LED5 H1 NC(CTG) IC3 OUTR1 ARM1 ARM1 LM1117 R4 LED6 M1 NC(CTG OUTG1 1kΩ LED7 S1 NC(CTG) $2.7k\Omega$ OUTB1 **-**//// OUTR2 13 <---w^ DIN NC(CTG) VOUT OUTG2 19 DOUT MISO LEDO ... LEDO M2 LED10 S2 LED_MOSI NC(CTG) 18 SCK OUTB2 SCK ARM2 ARM2 NC(CTG) C3 C4 OUTR3 16 10 SCKI 22uF 💳 12 SDTO OUTG3 17 3.6V Regulator OUTB3 18 SCKO LED11 H3 LED12 M3 LED13 S3 ARM3 ARM3 ATMega328P MCU → LED14 H4 TLC5971_SOP ARM4 ARM4 ◆LED15 M4 ATMEGA328P_TQFP LED16 S4 OUTRO 29 RESET(PC6) LED_SCK PC5(ADC5/SCL/PCINT13) OUTG0 PC4(ADC4/SDA/PCINT12) OUTB0 PC3(ADC3/PCINT11) OUTR1 ARM5 ARM5 LED18 M5 GND OUTG1 PC2(ADC2/PCINT10) LED19 S5 $2.7k\Omega$ OUTB1 PC1(ADC1/PCINT9) OUTR2 13 C6 1uF PCO(ADCO/PCINT8) OUTG2 LED20 H6 LED21 M6 LED22 S6 OUTB2 PD7(PCINT23/AIN1) ARM6 ARM6 10 OUTR3 16 PD6(PCINT22/OCOA/AINO) SCKI OUTG3 17 LED22 S6 12 SDTO PD5(PCINT21/OCOB/T1) C7 0.1uF 11 SCKO OUTB3 18 PD4(PCINT20/XCK/T0) C8 0.1uF RTC_INT PD3(PCINT19/OC2B/INT1) XTAL2(PB7) XTAL1(PB6) ◆LED23 H7 PD2(INTO/PCINT18) ARM7 ARM3 ◆ LED24 M7 LED25 S7 PD1(TXD/PCINT17) PB5(SCK/PCINT5) PD0(RXD/PCINT16) 31 30 × 16 PB4(PCINT4/MISO) MOSI RTC_CS RTC_RST 15 PB3(PCINT3/OC2A/MOSI) J10 TLC5971_SOP 14 PB2(PCINT2/55/0C1B) 13 PB1(PCINT1/OC1A) ARM8 ARM8 LED27 M8 R7 ≸ 10kΩ ≸ OUTRO ×12 PB0(PCINTO/CLKO/ICP1) ADC6 OUTG0 VREG OUTB0 LED29 H9 OUTR1 ARM9 → LED30 M9 ARM9 OUTG1 LED31 S9 OUTB1 8 $2.7k\Omega$ OUTR2 13 **√**₩ 3 SCK MOSI OUTG2 14 5 RESET GND 6 → LED32 H10 OUTB2 15 ARM10 ARM10 → LED33 M10 OUTR3 16 10 SCKI P11 AVR_ISP ×12 SDTO SCKO OUTG3 17 ☐ LED34 S10 OUTB3 18 ARM11 ARM11 →LED36 M11 Open Source Hardware LED37 S11 Released under the terms of the Creative Commons BY-SA 3.0 License Wiley Cousins, LLC. File: clockblock-pcb.sch Sheet: / Title: clockblock PCB Size: A Date: 24 sep 2013 Rev: 0.1 KiCad E.D.A. ld: 1/1