If PWR = +5V, replace D103 and IC107 (7805) with wires across their inputs and outputs, and mount D104. If PWR >= +7V, mount D103 and IC107 as intended, but do not mount D104. analog Capacitor information
All 10uF capacitors on this sheet are tantalums and have 16V tolerance 47µF C112 Calculating capacitance (Cxtal) for XTAL loading capacitors. CL = (C1 * C2) / (C1 + C2) + Cs CL = desired load capacitance according to crystal datasheet C1 = load capacitor at driven end of oscillator (ie gate output) C2 = load capacitor at other end Cs = stray capacitance in the PCB (guesstimate a few pF) VOUT GND1 If C1 = C2 = Cxtal, then CL = Cxtal / 2 + Cs or Cxtal = 2 * (CL - Cs) Vcc digital Vcc analog IC102 (MISO)PB4 (MOSI)PB3 10uF +5V/1 XTAL2 (SS)PB2 (OC1)PB1 470 R121 C126 R129 XTAL1 VREF AREF AVCC AGND (ADC4)PC4 (ADC3)PC3 10µF (ADC2)PC2 (ADC1)PC1 GND VCC GND 470R (AIN1)PD7 GND1 (AIN1)PD7 (AIN0)PD6 (T1)PD5 (T0)PD4 (INT1)PD3 R10UTZ R1IN R20UTO R2IN RXD X (INT0)PD2 (TXD)PD1 GND1 X GND1 AT90S4433F /RXD Note: ESD protected MAX232 available: MAX232E ADC[0..5] ADC[0..5] ModularEEG - Isolated µC/ADC module. See http://openeeg.sf.net for more information. Authors: Dipl.-Ing.(FH) Joerg Hansmann and Andreas R R106 modEEGdigital_v1_1_Rev. A R104 Olimex LTD, Bulgaria, 2013 220nF 220nF 220nF 220nF 220nF 220nF 220nF 220nF 220nF https://www.olimex.com Vcc digital PB1 is PWM output

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