# K616 USB Interface Board

A. Vene 2022

https://github.com/an-ven/K616-USB-Interface

Jumper settings:
JP1:1-2 ... Count Now -> D4 (PD4,ICP1)
JP1:2-3 ... Count Now -> D3 (PD0,INT0)
JP2:1-2 ... Gated Clock -> D12 (PD6,T1)
JP2:2-3 ... Gated Clock -> D2 (PD1,INT1)
JP3:Closed ... Display Hold <- D2 (PD1)

K616 signal to Arduino pin mapping:
Range SW Exp. 1*10^0 -> A3 (PF4)
Range SW Exp. 2*10^0 -> A2 (PF5)
Range SW Exp. 4*10^0 -> A1 (PF6)
Range SW Exp. 8*10^0 -> A0 (PF7)
Range SW Exp. 1*10^1 -> A4 (PF1)
Range SW Exp. Pol. -> A5 (PF0)
Range SW Function 1 -> D0 (PD2)
Range SW Function 2 -> D1 (PD3)
Sensitivity 1 Indicator -> D9 (PB5)
Sensitivity 2 Indicator -> D10 (PB6)
Sensitivity 4 Indicator -> D11 (PB7)
Sensitivity 1 Select <- D15 (PB1)
Sensitivity 2 Select <- D16 (PB2)
Sensitivity 4 Select <- D14 (PB3)
Manual Sensitivity <- D5 (PC6)
Zero Check Remote -> D6 (PD7)
Zero Check Indicator <- D7 (PE6)
Polarity Indicator <- D8 (PB4)
Gated Clock -> JP2 (See jumper settings)
Count Now -> JP1 (See jumper settings)
Display Hold <- JP3 (See jumper settings)


Arduino Based USB interface board for Keithley 616 Electrometer

**A. Vene**

Sheet:
File: K616_USB_IF.kicad_pcb

***Title: K616 USB Interface Board***

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|---|---|---|
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