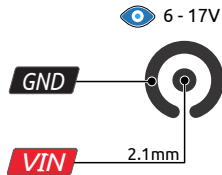
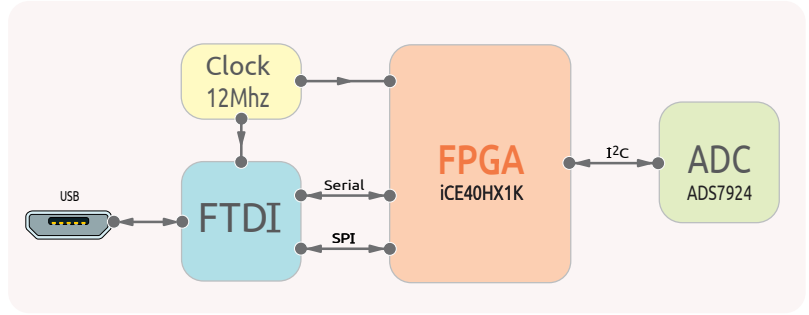


# ICEZUM

## Alhambra

- Power
- GND
- Serial Pin
- Analog Pin
- Control
- Physical Pin
- Icestudio name



**FPGA GPIO (5V)**  
 Input pins: at least +/- 2mA driving strength required  
 Output pins impedance:  
 4K (steady state)  
 40R (Transitions)

**FPGA Direct GPIO (3V3)**  
 Absolute Max per pin 8mA  
 Recommended 6 mA

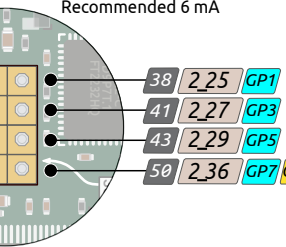
3V3 Pins

- 95 1.62 LED0
- 96 1.63 LED1
- 97 1.64 LED2
- 98 1.65 LED3
- 99 1.66 LED4
- 101 1.67 LED5
- 102 1.68 LED6
- 104 1.69 LED7

- 10 3.4B SW1
- 11 3.5A SW2

- RST Reset
- CLK Clock
- CLE Clock Enable

- CLK Clock 12Mhz 21 3.7A



- 5V
- RESET
- 3V3
- 5V P
- GND
- GND
- VIN

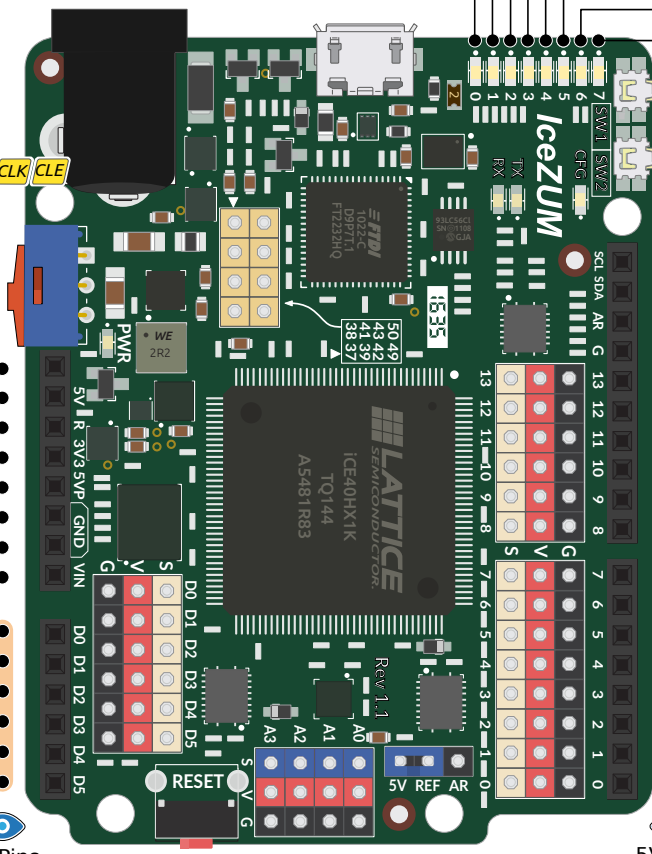
- DD0 1.52 78
- DD1 1.53 79
- DD2 1.54 80
- DD3 1.55 81
- DD4 1.57 88
- DD5 1.56 87

- SDA
- SCL

- Interrupt 93 1.60 ADC\_INT
- SDA 90 1.58 ADC\_SDA
- SCL 91 1.59 ADC\_SCL

- SCK 70 2.46 SCK
- SDI 68 2.45 MOSI
- SDO 67 2.44 MISO
- SS 71 2.47 SS
- DONE 65 CDONE DONE
- REST 66 CREST RES

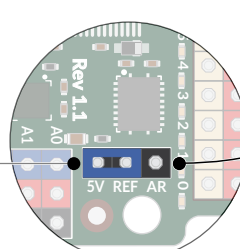
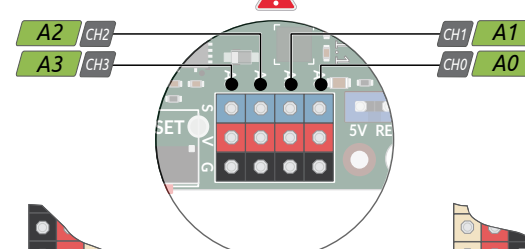
- RX 9 3.4A RX
- TX 8 3.3B TX
- RTS 7 3.3A RTS
- CTS 4 3.2B CTS
- DTR 3 3.2A DTR
- DSR 2 3.1B DSR
- DCD 1 3.1A DCD



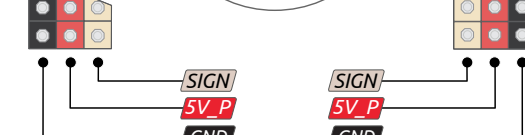
- 87 1.56 DD5 SCL
- 88 1.57 DD4 SDA
- AREF
- GND
- 144 0.96 D13
- 143 0.95 D12
- 142 0.94 D11
- 141 0.93 D10
- 139 0.92 D9
- 138 0.91 D8
- 112 0.73 D7
- 113 0.74 D6
- 114 0.75 D5
- 115 0.76 D4
- 116 0.77 D3
- 117 0.78 D2
- 118 0.79 D1
- 119 0.80 D0

External Analog Reference

Connected to ADS7924 via I2C



Analog Reference  
 AREF >= 3V3



Max 3A for all power supply pins