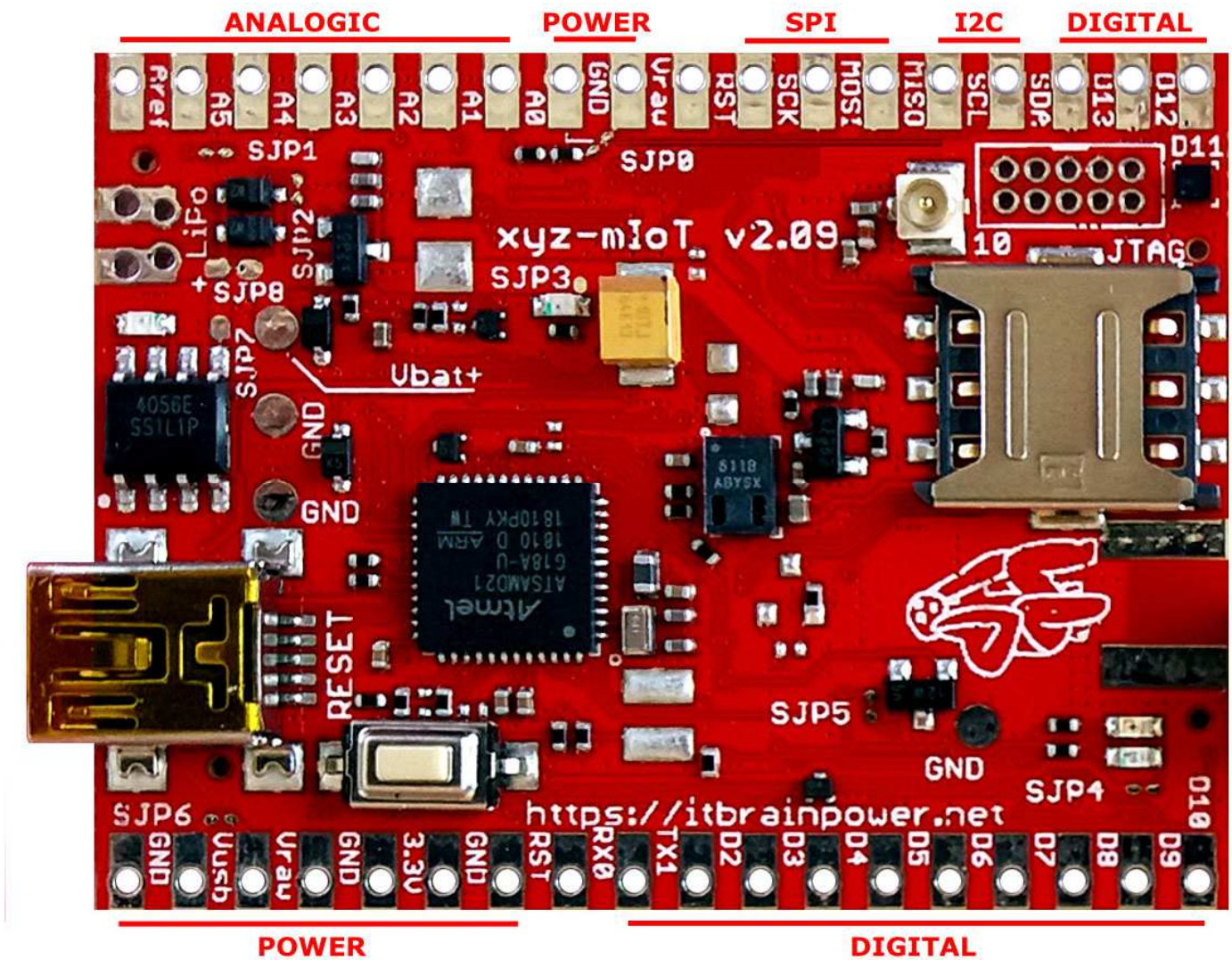


## xyz-mIoT v2.09 by itbraipower.net pinout, port mapping and additional info



<b>bottom, left to right</b>	Marking	MCU port	Description and additional info
POWER	GND		ground power
POWER	Vusb		5V from USB port
POWER	Vraw		board powering, input voltage 4.8->7V
POWER	GND		ground power & digital
POWER	3.3V		default 3V3 internal LDO output / 3V3 power input*
RESET	RST		ARM0 RESET, active low
DIGITAL	RX0	PA11	Serial0 RX / Arduino digital pin 0, 100ohm resistor embedded
DIGITAL	TX1	PA10	Serial0 TX / Arduino digital pin 1, 100ohm resistor embedded
DIGITAL	D2	PA14	Arduino digital pin 2
DIGITAL	D3	PA09	Arduino digital pin 3, [CCS811_WAKE_PIN <sup>3</sup> ]
DIGITAL	D4	PA08	Arduino digital pin 4, [CTRL_PIN_GNSSANTENNAPOWER <sup>6</sup> ], enable/disable GNSS active antenna power, output/high impedance
DIGITAL	D5	PA15	Arduino digital pin 5, [HDC2010_INTERRUPT_PIN <sup>2</sup> ] - config via SJP5 default connected
DIGITAL	D6	PA20	Arduino digital pin 6, [HALL_IRQ_PIN <sup>4</sup> ]
DIGITAL	D7	PA21	Arduino digital pin 7, 10Mb weak pull up embedded
DIGITAL	D8	PA06	Arduino digital pin 8, [CCS811_INT_PIN <sup>3</sup> ]
DIGITAL	D9	PA07	Arduino digital pin 9
DIGITAL	D10	PA18	Arduino digital pin 10
<b>top, right to left</b>	Marking	MCU port	Description and additional info
DIGITAL	D11	PA16	Arduino digital pin 11

DIGITAL	D12	PA19	Arduino digital pin 12
DIGITAL	D13	PA17	Arduino digital pin 13, default [LED_BUILTIN], YELLOW LED - config via SJP4 default connected **
I2C	SDA	PA22	I2C SDA, 100k embedded pull up
I2C	SCL	PA23	I2C SCL, 100k embedded pull up
SPI	MISO	PA12	SPI MISO
SPI	MOSI	PB10	SPI MOSI
SPI	SCK	PB11	SPI SCK
RESET	RST		ARM0 RESET, active low
POWER	Vraw		board powering, input voltage 4.8->7V
POWER	GND		ground power, digital, analogic
ANALOGIC	A0	PA02	Arduino analog pin 0
ANALOGIC	A1	PB08	Arduino analog pin 1
ANALOGIC	A2	PB09	Arduino analog pin 2
ANALOGIC	A3	PA04	Arduino analog pin 3
ANALOGIC	A4	PA05	Arduino analog pin 4, default used for Vraw sampling - config via SJP0 default connected**
ANALOGIC	A5	PB02	Arduino analog pin 5, default used for VbatPin sampling - config via SJP1 and SJP2 default both connected**
ANALOGIC	Aref	PA03	Arduino AREF/DAC
<b>left, top to bottom</b>	Marking		Description and additional info
LiPo GND	LIPo		LiPo battery GND*
LiPo +	LiPo +		LiPo battery +*

#### Additional ports wired internally

digital	D25	PB03	Arduino digital pin 25 <sup>1</sup> , [HALL_PULLUP_PIN <sup>4</sup> ]
digital	D26	PA27	Arduino digital pin 26 <sup>1</sup> , [lprCtrlPIN <sup>5</sup> ], ON/OFF modem, output/high impedance
digital	D38	PA13	Arduino digital pin 38, [CTRL_PIN_MODEMPOWER <sup>5</sup> ], CUT modem power, output

#### LEDs

left side		LiPo battery charger led, RED
middle, under SJP3 marking		enabled modem power LED indicator, RED
right side, bottom		LED_BUILTIN [D13], YELLOW
right side, just above YELLOW LED		modem network status LED, GREEN

Digital and analogic pins advanced info and alternate configuration, see: variants.h and variants.c

\* read power how to and advanced configuration

\*\* read solder jumpers, LEDs and advanced hardware configuration

1. modified definitions comparing with Arduino Zero
2. if HDC2010 is present - PN suffix like 1xxxxxx
3. if CC811 is present - PN suffix like xxxx1xx
4. if DRV5032 is present - PN suffix like x1xxxxxx
5. all variants with modem.
6. only for Quectel BG96, PN like XYZMIOT209#BG96-yyy-xxxxxxx