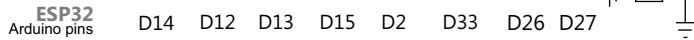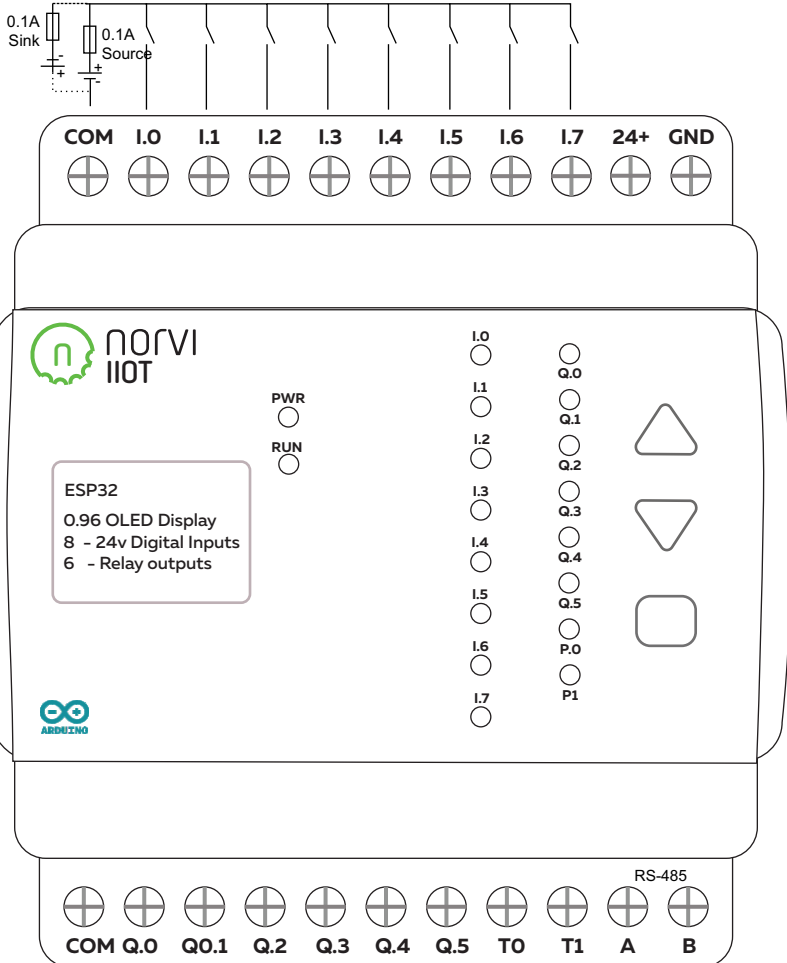# NORVI IIOT

ESP32 WROOM-32

CE

EN 61131-2:2007
EN 61010-1:2010+A1:2019
EN IEC 61010-2-201:2018

2014/30/EU- Electromagnetic Compatibility (EMC)
Annex III, Part B, Module C

Quick Guide
Connections and Programming

Micro-controller

Chip	ESP32-WROOM32
Clock	80 Mhz
Bootloader	ESP32 Arduino

microSD Card connections

SCK	IO18	CS	IO5
MISO	IO19	SD Detect	IO14
MOSI	IO23		

OLED Display 0.96'

Interface	I2C 0x3C(Address)		
Controller	SSD1306		
OLED_SCL	IO16	OLED_SDA	IO17

DS3231 RTC

Interface	I2C 0x3C(Address)		
Controller	DS3231		
OLED_SCL	IO16	OLED_SDA	IO17

Power

Supply Voltage	24V DC
Digital input voltage	24V Sink/Source
Relay Max. current	5A max
Transistor Max. current	500mA

TFT Display 0.96'

Interface	SPI		
Controller	ST7789		
TFT_SCK	IO18	TFT_RST	IO32
TFT_MOSI	IO23	TFT_DC	IO13
TFT_CS	IO27		

24V DC Sink/Source

ESP32 Arduino pins: IO18 VN IO34 IO35 IO19 IO21 IO22 IO23

0.1A Sink
0.1A Source

COM	I.0	I.1	I.2	I.3	I.4	I.5	I.6	I.7	24+	GND

norvi IIOT

PWR
RUN

ESP32
0.96 OLED Display
8 – 24v Digital Inputs
6 – Relay outputs

ARDUINO

I.0 Q.0
I.1 Q.1
I.2 Q.2
I.3 Q.3
I.4 Q.4
I.5 Q.5
I.6 P.0
I.7 P1

COM	Q.0	Q0.1	Q.2	Q.3	Q.4	Q.5	T0	T1	A	B

RS-485

ESP32 Arduino pins: D14 D12 D13 D15 D2 D33 D26 D27

ANT1

PROGRAM Port
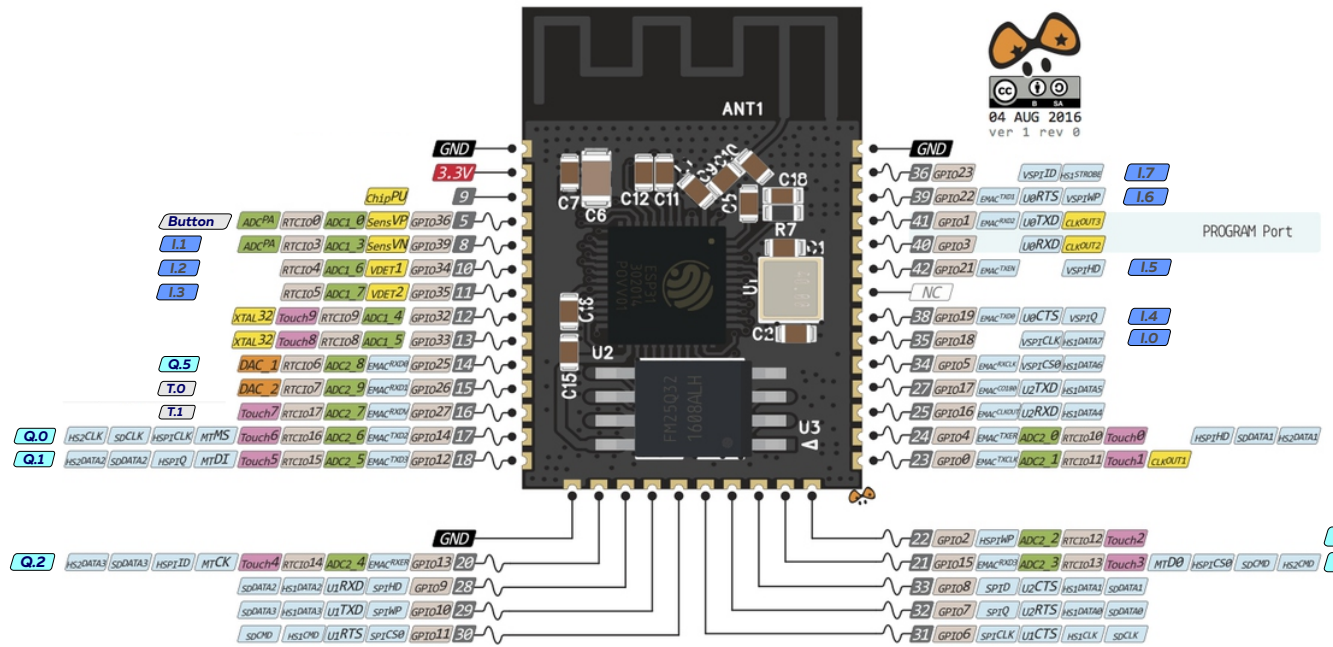
Expansion port

PIN 1 — INDEX
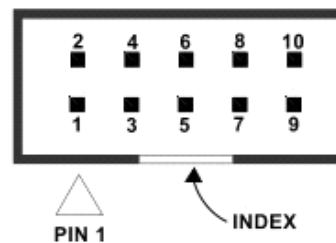
PIN	ESP32 Connection		
1	IO33	6	IO32
2	TXD0	7	Not Connected
3	Not Connected	8	SCL IO17
4	RXD0	9	Ground
5	BOOT IO0	10	SDA IO16