















	USB to UART		
VBUS 1 +5V USB D- 3 D+ 4 D+ 4 × GND 5 C2	8 GND RTS# 16 CTS# 11 X UD - DTR# UD + DSR# 12 X DSR# 14	R35 220R/R0603 R40 220R/R0603 R41 Q4 BCB17-40(SOT23) R42 Q5 BCB17-40(SOT23)	GPI03/U0RXD GPI01/U0TXD ESP_EN Auto program DTR_RTS->EN_IOO 1 1 1 1 0 0 1 1 1 0 0 1 1 1 0 0 1 0 1 1 1 0 0 1 1 0 0 1 1 1 0 0 1 1 1 0 0 1 1 1 0 0 1 1 1 0 0 1 1 1 0 0 1 1 1 1

EMAC I2C	Signal EMAC_MDC_out EMAC_MDLon EMAC_MDO_out EMAC_CS_out EMAC_CS_out IZCEXTO_SCL_in IZCEXTO_SCL_in IZCEXTI_SDL in IZCEXTI_SDL in IZCEXTI_SDL in IZCEXTI_SDL in IZCEXTI_SDL out IZCEXTI_SDL out IZCEXTI_SCL_out IZCEXTI_SCL_out IZCEXTI_SDL out	Pin Any GPIO Any GPIO
EMAC I2C	EMAC_MDL_in EMAC_MDQ_out EMAC_CRS_out EMAC_COL_out IZCEXT0_SCL_in IZCEXT0_SDA_in IZCEXT1_SDA_in IZCEXT1_SDA_in IZCEXT1_SDA_in IZCEXT1_SDA_in IZCEXT1_SDA_in IZCEXT1_SDA_in IZCEXT0_SCL_out	
I2C	I2CEXTO_SDA_in I2CEXT1_SCL_in I2CEXT1_SDA_in I2CEXT0_SCL_out I2CEXT0_SDA_out I2CEXT0_SDA_out	Any GPIO
	IZCENII_SUM_OUT	
General Purpose SPI	HSPIQ_in/_out HSPID_in/_out HSPIC_K_in/_out HSPLCSO_in/_out HSPLCSS_out HSPLCSS_out VSPIQ_in/_out VSPIQ_in/_out VSPIC_IN/_out VSPIC_SO_in/_out VSPIC_SO_in/_out VSPIC_SO_in/_out VSPIC_SO_in/_out VSPIC_SO_in/_out VSPIC_SO_out	Any GPIO

		Voltage of Intern	al LDO(VDD_SDIO)		
Pin	Default	3.3V	1.8V		
GPI012/MTDI	Pull-Down	0	1	Bootstrapping Pins	
		Bootin	g Mode		
Pin	Default	SPI Flash Boot	Download Boot	iii Seti	tings
GPI00	Pull-Up	1	0		
GPI02	Pull-Down	Don't-care	0		
		Debugging Log on L	IOTXD During Booting		
Pin	Default	UOTXD Toggling UOTXD Silent			
GPI015/MTD0	Pull-Up	1	0		
		Timing of	SDIO Slave		
Pin	Default	Falling-edge:Output	Falling-edge:Input Rising-edge:Output	Rising—edge:Input Falling—edge:Output	Rising-edge:Input Rising-edge:Output
GPI015/MTD0	Pull-Up	0	0	1	1
GPI05/PHY_PW	/RPull-Up	0	1	0	1

Internal Bootstra	apping Resistors
MTDI/GPI012:	Pull-Down
GPI00:	Pull-Up
GPI02:	Pull-Down
GP104:	Pull-Down
MTDO/GPI015:	Pull-Up
GPI05/PH	Y_PWRP.ull-Up

https://www.olimex.com OLIMEX LTD.	
Sheet: / File: ESP32-GATEWAY_Rev_D.sch	
Title: ESP32-GATEWAY	
Size: A2 Date: 2018-05-09	Rev: D
KiCad E.D.A. kicad (6.0.0-rc1-dev-1322-g1858b7dca)	ld: 1/1