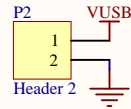
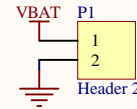


Title:	CPU	*
Number:	*	*
Date: 18/05/2023	Sheet * of *	Revision: *
File: S:\arquivos_pessoais\fernando\trabalho\maua\DET\PROJETOS\LoRa\NODE\hw\LORASIMPLESv4\LoraCpu.SchDoc		

CONECTOR PARA CABO PARA CARREGAR A BATERIA
MAXIMA TENSÃO PERMITIDA +5V9

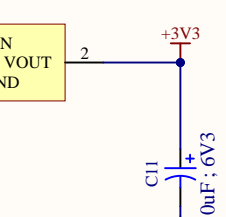
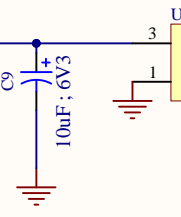
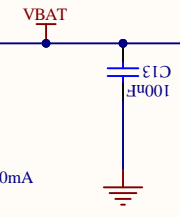
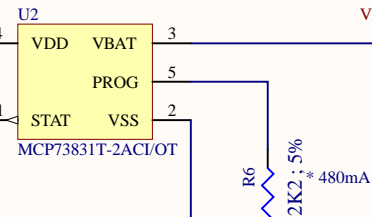
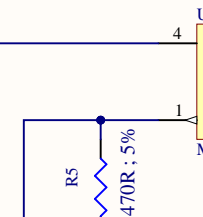
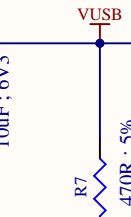
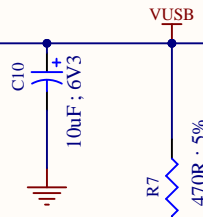
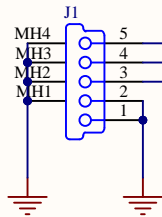


Bateria 3V7max - Li-Ion & LiPoly Batteries



Cannot open file
 C:\arquivos_pessoais\fernando\trabalho\maua\DET\projetos\Daimon-Sulgipe\HW\LORARFID\IMAGENS\S2B-XH-A.bmp

0476420001



CONECTOR USB PARA CARREGAR A BATERIA
MAXIMA TENSÃO PERMITIDA +5V9

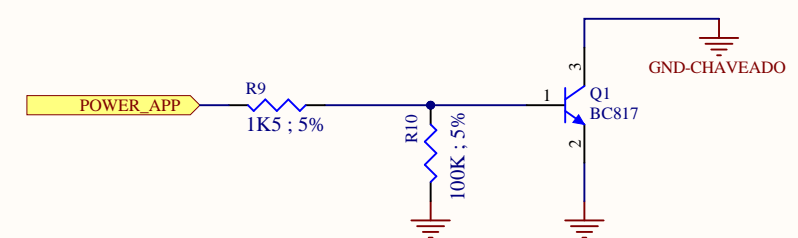
Cannot open file
 C:\arquivos_pessoais\fernando\trabalho\maua\DET\projetos\Daimon-Sulgipe\HW\LORARFID\IMAGENS\0476420001_sml.jpg

Surface Mount Female Mini-B USB Connector

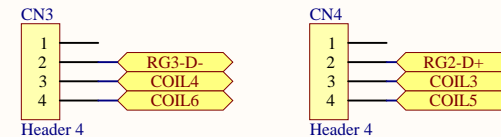
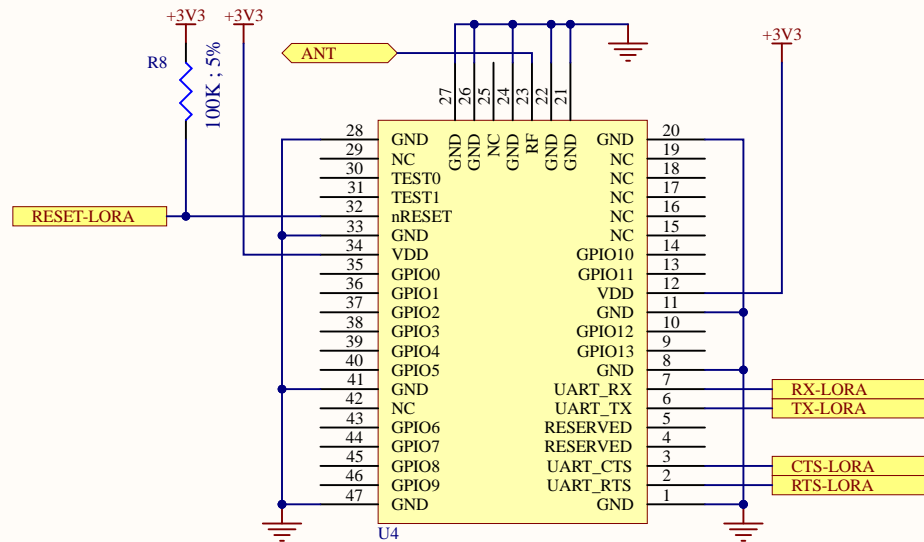
STATUS - VM

STATUS - VD

MCP1702T-3302-E/CB



Title:	FORTE	*
Number:	*	*
Date: 18/05/2023	Sheet * of *	Revision: *
File: S:\arquivos_pessoais\fernando\trabalho\maua\DET\PROJETOS\LoRa\NODE\hw\LORASIMPLeSv4\LoRaFonteSchDoc		

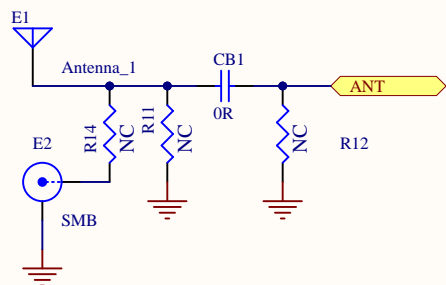


para prototipagem em geral

RF CHIP ANTENNA 902 - 928MHZ - JOHANSON 0915AT43A0026E

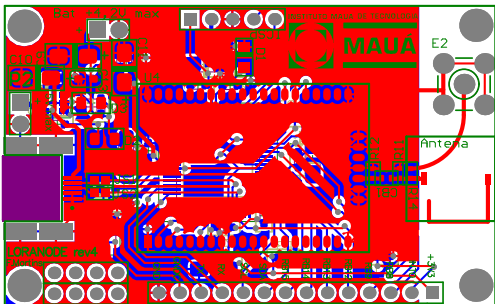
Cannot open file
C:\arquivos_pessoais\fernando\trabalho\maua\DET\projetos\Daimon-Sulgipe\HW\LORARFID\IMAGENS\PCBANTENA.bmp

Cannot open file
C:\arquivos_pessoais\fernando\trabalho\maua\DET\projetos\Daimon-Sulgipe\HW\LORARFID\IMAGENS\0915AT43A0026E.jpg



Title:	MÓDULOS		*
Number:	*		*
Date: 18/05/2023	Sheet *	of *	Revision: *
File: S:\arquivos_pessoais\fernando\trabalho\maua\DET\PROJETOS\LoRa\NODE\hw\LORASIMPLESv4\LoraModulos.SchDoc			





INSTITUTO MAUA DE TECNOLOGIA

Layer Stack Up Detail for: LORANODE v4

Rev.: 1.0

Top Layer

MASCARA ANTI-SOLDA : AZUL
SERIGRAFIA : BRANCO

MATERIAL : FR-4 (1.6mm)
COBRE BASE : 35 um (1oz)

Bottom Layer

ACABAMENTO : HOT AIR LEVELING
METALIZACAO DO FURO : Cu (35um) + SnPb

Description	Designator	Encapaulamento	Encapsulamento	Footprint	Obs	Quantity	Valor	Value
Capacitor de tântalo	C1			CASE-A		1	10uF ; 6V3	
Capacitor de tântalo	C2			CASE-A		1	10uF ; 6V3	
Capacitor Cerâmico SMD	C3		0402	0603 - CAP		1	100nF	
Capacitor Cerâmico SMD	C4		0402	0603 - CAP		1	100nF	
Capacitor Cerâmico SMD	C5		0402	0603 - CAP		1	100nF	
Capacitor de tântalo	C6			CASE-A		1	10uF ; 6V3	
Capacitor Cerâmico SMD	C7		0402	0603 - CAP		1	100nF	
Capacitor de tântalo	C8			CASE-A		1	10uF ; 6V3	
Capacitor de tântalo	C9			CASE-A		1	10uF ; 6V3	
Capacitor de tântalo	C10			CASE-A		1	10uF ; 6V3	
Capacitor de tântalo	C11			CASE-A		1	10uF ; 6V3	
Capacitor Cerâmico SMD	C12		0402	0603 - CAP		1	100nF	
Capacitor Cerâmico SMD	C13			0603 - CAP		1		100nF
Capacitor Cerâmico SMD	CB1			0402		1		0R
Header, 5-Pin	CN1			HDR1X5		1		
Header, 14-Pin	CN2			HDR1X14		1		
Header, 4-Pin	CN3			HDR1X4		1		
Header, 4-Pin	CN4			HDR1X4		1		
Led	D1		0805	LED 0805 AM		1	WT	
Led	D2		0603	LED 0603 AM		1	STATUS - VM	
Led	D3		0603	LED 0603 AM		1	STATUS - VD	
Antenna PCI LoRa	E1			HADA31 TAOGLAS		1		
SMB Straight Connector	E2			SMB_V-RJ45		1		
USB On-The-Go (OTG) Mini-B Receptade, Right Angle, SMT, 0.80mm (.031") Pitch, Solder Tabs with Back Cover, Recessed Type	J1			481900001		1		
JUMPER DE SOLDA 2 VIAS	JS1			JUMPER SOLDA 2 VIAS		1		
JUMPER DE SOLDA 2 VIAS	JS2			JUMPER SOLDA 2 VIAS		1		
Header, 2-Pin	P1			HDR1X2		1		
Header, 2-Pin	P2			HDR1X2		1		
Transistor NPN	Q1			SOT23-3N FAIRCHILD		1		
Resistor	R1		0402	0603		1	100K ; 5%	
Resistor	R2		0402	0603		1	100K ; 5%	
Resistor	R3		0402	0603		1	100K ; 5%	
Resistor	R4		0402	0603		1	1K5 ; 5%	
Resistor	R5		0402	0603		1	470R ; 5%	
Resistor	R6		0402	0603		1	2K2 ; 5%	
Resistor	R7		0402	0603		1	470R ; 5%	
Resistor	R8		0402	0603		1	100K ; 5%	
Resistor	R9		0402	0603		1	1K5 ; 5%	
Resistor	R10		0402	0603		1	100K ; 5%	
Resistor	R11		0402	0402		1	NC	
Resistor	R12		0402	0402		1	NC	
Resistor	R13		0402	0603		1	100K ; 5%	
Resistor	R14		0402	0402		1	NC	
Microcontrolador PIC	U1		TQFP-64	TQFP-64 MICROCHIP		1	PIC24FJ128GA306-I/PT	
Miniature Single-Cell, Fully Integrated Li-Ion, Li-Polymer Charge Management Controller, 4.2V, 5 Pin SOT-23, Industrial Temperature, Tape and Reel	U2			SOT-23-OT5_N		1		
Regulador de tensão	U3		SOT-89	SOT23-3N - MCP17XXX		1		
LORA Transceiver Module	U4			RN2903		1	RN2903	