

GPIO + UART specs – Location beacon

Absolute maximum ratings ⁽¹⁾

Parameter		Min.	Max.	Unit	
Pin voltage ⁽²⁾	V _{CC IN}	-0.3	3.9	V	
	GPIO1, GPIO2	Without auxiliary supply voltage on V _{CC IN} pin	-0.3	2.3V	V
		With auxiliary supply voltage on V _{CC IN} pin	-0.3	V _{CC IN} +0.3V	
Storage temperature range	with batteries	-40	+70	°C	
	without batteries	-40	+85	°C	

(1) Exceeding any of the limits listed here may result in permanent damage to the device

(2) All voltage values are with respect to network ground terminal GND

Recommended Operating Conditions

Parameter		Min.	Typ.	Max.	Unit	
V _{CC IN}	Auxiliary supply voltage V _{IN}	2.1	3.3	3.6	V	
V _{CC}	Device internal supply voltage	Without auxiliary supply voltage on V _{CC IN} pin	1.95	2.0	2.05	V
		With auxiliary supply voltage on V _{CC IN} pin	1.8	3.0	3.3	
T _A	Operating temperature range	with batteries	-10		+60	°C
		without batteries (external power supply)	-25		+75	°C

Electrical Characteristics

T_A = -40°C to 85°C typical values are at T_A = 25°C (unless otherwise noted)

Parameter		Min.	Typ.	Max.	Unit
Power					
I _{IN}	Device input current (from V _{CC IN} pin)			50	mA
General Purpose I/O (GPIO)					
V _{IH}	Input high voltage	0.7 V _{CC}		V _{CC}	V
V _{IL}	Input low voltage	0		0.3 V _{CC}	V
V _{OH}	Output high voltage (high-drive, 5 mA)	V _{CC} - 0.3		V _{CC}	V
V _{OL}	Output low voltage (high-drive, 5 mA)	0		0.3	V
R _{PU}	Pull-up resistance	11	13	16	kΩ
R _{PD}	Pull-down resistance	11	13	16	kΩ
R _{SER}	Series resistance		100		Ω
Universal Asynchronous Receiver/Transmitter (UART)					
f _{UART}	Baud rate for UART		115 200		bps
Parity		None			
Flow Control		None			