

Name : AEON Test procedure

Function : Lora-module RA0.1 Test Process

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Destinator : AEON

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Software required : [AEON_1.Hex](#), STM32 ST_Link Utility, Dockliht.

Hardware required : AEON Lora Moudule, St_LINK, ttl-232r-3v3, USB-RS485, USB-RS232, 2 batterie AAA 1.5v, I2C sensor.

Test to be done : SW, Battery Power, Reset Bouton, LEDS, 2 Botton, UATRT2, UART1/RS485/RS232,
I2c, ADC1/ADC2/ADC3/ADC4, Lora Radio.

Version	Date	Description
1.0	30-10-17	Creation

Step	Test To be Done	Actions	Comments	Ok/notOK
1	SW	-CN8, Jumper in position 1-2 -Put 2 batterie AAA 1.5v in the battery holder. -Flash both AEON Board with AEON_1.Hex using "ST_Link Utility"	Need the second board for the radio test.	
	Battery Power			
2	Rest Boutton	- Push the Reset Boutton	All leds must come On/Off alternately.	
	LED Bleu			
	LED Grenn			
	LED RED1			
	LED RED2			
3	Botton B1	-Push B1 one time	all leds must come Off	
	Botton B2	-Push B2	One Time only Grenn Led turn On/Second push only bleu led turn On/..... and so on.	
4	UATRT2	1-Connecte the UART2 to PC with ttl-232r-3v3 . -UART2 : Rx=PA3 Header1 (10) Tx=PA2 Header1 (11) GND Header1 (18) 2- Dockliht with Port configuration : Baud rate :115200, Parity :None Data Bits :8 Stop Bits :1 3- Push B1 one time	-Only Led Grenn must turn On. - The console must receive the following message "*****UART2_Init*****"	
5	UART1	1- J1/J2/J3/J4 to the position 1-2 2-Connecte the UART1 to USB PC with ttl-232r-3v3 . -UART1 : Rx=PA10 Header1 (5) Tx=PA9 Header1 (6) GND Header1 (18) 3- Dockliht with Port configuration :	-Only Led Bleu must turn On. - The console must receive the following message "*****UART1_Init*****" and the following message "GoodUART1" periodically	

		Baud rate :115200, Parity :None Data Bits :8 Stop Bits :1 4- Push B1 one time		
6	I2C	1-Don't remove the serial cable,we will use the consol for the next debugs 2-Connecte the sensor to the I2C pin -I2C pin : SCL=PB8 Header2 (1) SDA=PB9 Header2 (2) GND Header2 (18) Vcc+3.3v Header1(2) 4- Push B1 one time 5-Use "send sequences" edit mode "hex" in dockliht to send the device adrr and the who_I_Am register adrr of the sensor.	6-4 : -Only Led RED1 must turn On -The console must receive the following message "*****I2C_Init*****" "Please Give the SensorAdrr and RegAdrr with HEX Mode" 6-5 The consol must receiver the following message « SensorAdrr=xx, RegAdrr=xx , WhoIAm=xx »	
7	ADC2	1 -Connect one or all of the ADCPin to a voltage source, for example to the batteries. ADCPin: ADC2 :PA2 Header1 (11) ADC3 :PA3 Header1(10) ADC4 :PA4 Header1 (9) ADC5 :PA5 Header1 (8) 2- Push B1 one time	7-2 : -The console must receive the following message "*****ADC1234_Init*****" view the adcxx level successfully	
	ADC3			
	ADC4			
	ADC			
8	Radio	1-Need second board at step 7 2- Push B1 one time for each board.	-The console must receive the following message "*****Test Radio Ping pong*****" The led flashing view the "RSSi Level and The SN level "successfully	
9	RS485 (Without control flow)	1-J1/J2/J3/J4 to the position 3-4(RS485) 2-Remove the ttl-232r-3v3 and make Usb-RS485 at the Same configuration with step 5-1/5-2 . 3- Push B1 one time	-Led Green On. - The console must receive periodically the following message "GoodRS485"	
10	RS232 (Without control flow)	1- J1/J2/J3/J4 to the position 5-6(RS232) 2-Remove Usb-RS485 and make Usb-RS232 at the Same configuration with step 5-1/5-2 . 3- Push B1 one time	-Led Bleu On. - The console must receive periodically the following message "GoodRS232"	
11		Push B1 one time for each board	Return to Step2	