
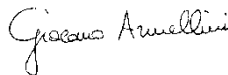



TEST SETUP PHOTO DOCUMENT

APPLICANT:	EMBIT S.r.l EMBEDDED & WIRELESS SOLUTION Via Emilia Est, 911 – 41100 Modena (MO) Italy Phone +39 059 371714 Fax +39 059 3680498	
APPLICANT REFEREE:	Mr. Daniele Rosani	
EUT DESCRIPTION	ZIGBEE Radio module	
EUT MODEL	EMB-Z2538PA	
EUT VERSIONS	EMB-Z2538PA / UL, EMB-Z2538PA / IA	
EUT FCC ID	Z7H-EMB2538PA	
EUT TRADEMARK		
MANUFACTURER	EMBIT S.r.l EMBEDDED & WIRELESS SOLUTION.	
TEST REPORT NUMBER	TSupPhotos_140934-1 (related to FCCTR_140934-1 test report)	
TEST REPORT ISSUE DATE	04/12/2015	
TESTING LABORATORY	Prima Ricerca & Sviluppo S.r.l. Via Campagna, 92 -22020 Faloppio (Co) – Italy FCC test registration number: 421808	
TESTING LOCATION	As Above	
DATE OF TEST SAMPLE RECEIPT	08/08/2014	
DATE OF TEST	August/September 2014	
TESTED BY	Giacomo ARMELLINI Responsabile Laboratorio EMC e RADIO/ EMC and RADIO Laboratory Manager	
APPROVED BY	Vincenzo LA FRAGOLA Direttore generale / Managing director	

The test results reported in this test report shall refer only to the sample actually tested and shall not refer or be deemed to refer to bulk from which such a sample may be said to have been obtained.
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1. RELEASE CONTROL RECORD

TEST REPORT NUMBER	REASON OF CHANGE	DATE OF ISSUE
TSupPhotos_140934-0	Original release	10/06/2015
TSupPhotos_140934-1	Editorial Change	04/12/2015

2. TECHNICAL INFORMATION OF EQUIPMENT UNDER TEST (EUT)

2.1 Identification

Trademark:	
Manufacturer:	EMBIT S.r.l EMBEDDED & WIRELESS SOLUTION.
Type of Equipment :	ZIGBEE Radio module
Model name:	EMB-Z2538PA
Versions:	EMB-Z2538PA / UL, EMB-Z2538PA / IA In the EMB- Z2538PA / UL version: the RF output is connected to the uF.I connector via the 0ohm resistor In the EMB- Z2538PA / IA version: the RF output is connected to the integrated PIFA antenna via the 0ohm resistor
Serial number :	prototype
FCC ID :	Z7H-EMB2538PA
Country of manufacturer:	ITALY

2.2 Technical data

Product type:	Radio Equipment
Radio type:	Intentional radiators
Product description / application	The EUT is 2.4GHz Zigbee Transceiver
Power supply requirements :	2V to 3.6V (typ. 3V) 3,3V (powered by demoboard connected to PC USB port)
Operating Frequency range	2400-2483,5MHz
Operating Frequency:	From 2405MHz to 2480MHz
Channel bandwidth	5MHz
Channel spacing	5MHz
Number of Channel	16
Modulation Type	QPSK
Antenna Type	<p>EMB-Z2538PA / IA:</p> <p>Manufacturer: EMBIT</p> <p>Type: Printed Integrated PIFA Antenna</p> <p>Model: EMB-AN24-15PFA</p> <p>Gain: -2 dbi</p> <p>Connector: pad</p>
	<p>EMB-Z2538PA / UL:</p> <p>Antenna:</p> <p>Manufacturer: EMBIT</p> <p>Type: Swivel Antenna</p> <p>Model: EMB-AN24-70SA-R1</p> <p>Gain: 7dbi</p> <p>Connector: SMA Reverse Polarity</p> <p>Cable:</p> <p>Manufacturer: EMBIT</p> <p>Type: SMA-RP (Female) To U.FL diameter 1.37mm</p> <p>Model: EMB-CA-SU-100</p> <p>Loss: 0.25dB</p> <p>Connector: u.FI – SMA Reverse Polarity</p>
Power Control Setting	EA

2.3 Ports identification

This section contains descriptions of all signal ports and AC/DC power input/output ports, the length and the type of the cable provided by manufacturer needed for the tests. Moreover it is specified if the ports are ever or optionally connected.

Port		Description	Connection
1	Enclosure	Not present (electronic PCB board only)	Plug-in electronic board
2	AC Power Supply	Not present (electronic PCB board only)	-----
3	DC power supply	3.3Vdc	Plug-in electronic board
4	Signal lines	Signal line	Plug-in electronic board
5	Telecomm. Lines	Not present (electronic PCB board only)	-----
6	Antenna port	For external antenna	u.FI connector
<i>Note: During the tests all cables must be what provided the manufacturer or the same that used in the real employment of the EUT.</i>			

2.4 Auxiliary equipment

- EMBIT Evaluation Board EMB-Z2538PA(/xx)-EVB (used during the session to power supply the EUT and for channel setting)

3. PHOTOGRAPHIC SECTION

PHOTO N°1 – EUT IDENTIFICATION



PHOTO N°2 – EVALUATION BOARD + EUT

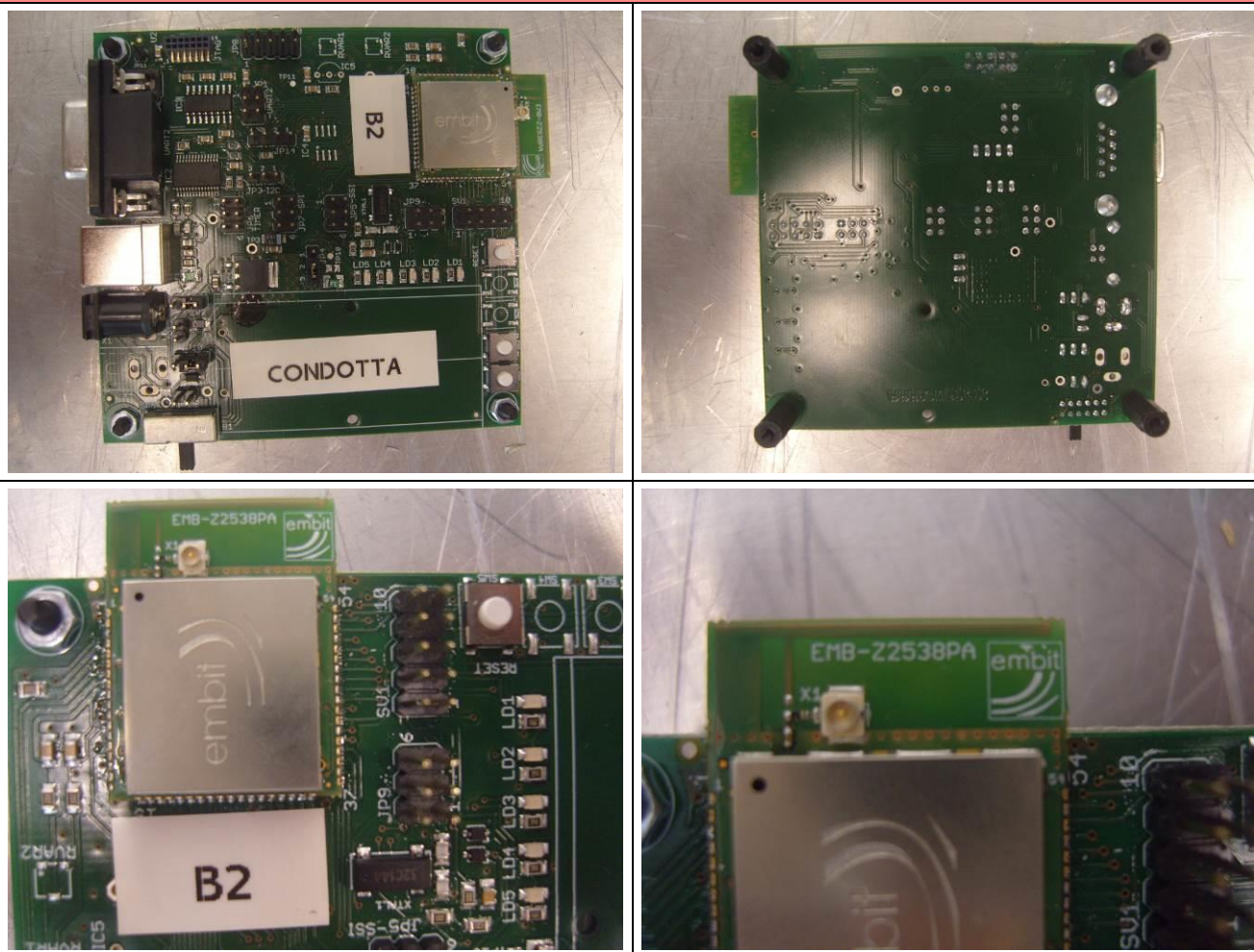


PHOTO N°3
SETUP FOR RADIATED MEASUREMENT <1GHz

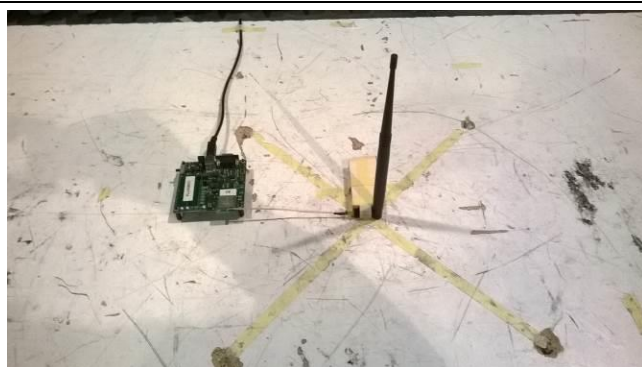


PHOTO N°4
SETUP FOR RADIATED MEASUREMENT >1GHz

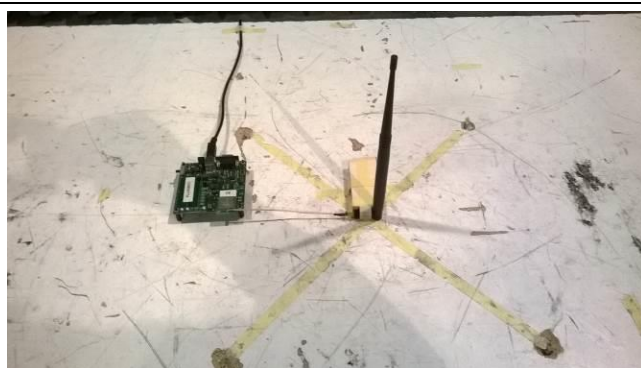


PHOTO N°5
SETUP FOR CONDUCTED MEASUREMENTS

