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## **RADIO & TELECOMMUNICATIONS TERMINAL EQUIPMENT DIRECTIVE 1999/5/EC NOTIFIED BODY OPINION**

**TECHNICAL CONSTRUCTION FILE**

IDENTITY No: JN516x EK001 Evaluation Kit TCF

REVISION STATUS: Issue 1.0, January 2013

APPLICANT: NXP Laboratories UK Ltd  
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MANUFACTURER: NXP Laboratories UK Ltd  
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EQUIPMENT IDENTIFICATION: JN516x EK001 Evaluation Kit containing the following sub-components:

DR1128 Programming Dongle  
DR1159 Remote control unit  
DR1174 Carrier board  
DR1175 Lighting/Sensor Expansion Board  
DR1178 JN5168-001-M00 Module  
DR1180 JN5168-001-M03 Module  
DR1198 JN5168-001-U00 USB Dongle  
DR1199 Generic Expansion Board  
DR1200 JN5168-001-M05 10dBm Module  
DR1201 LCD Expansion Board  
Linksys WRT160NL Router

**NORTH WEST**

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INTENDED USE/PURPOSE:	IEEE802.15.4 Microcontroller Evaluation Kit for Developer use
FREQUENCY BAND(S):	2.400GHz-2.483.5GHz
TYPE OF MODULATION:	DSSS - OQPSK
CHANNEL SPACING:	Not Applicable
ITU EMISSION DESIGNATION:	2M00M1D
TRANSMIT POWER / POWER RANGE:	Less than 100mW EIRP, Typically:  2.24mW for the DR1178 JN5168-001-M00 Module 2.24mW for the DR1180 JN5168-001-M03 Module 0.7mW for the DR1198 JN5168-001-U00 USB Dongle 12.6mW for the DR1200 JN5168-001-M05 10dBm Module
DUTY CYCLE:	<1%
CHANNEL ACCESS PROTOCOL:	Not Applicable
TYPE OF ANTENNA:	Internal and External
DUPLEX DIRECTION:	Duplex
REFERENCE STANDARDS:	Radio:  EN 300 328 v1.7.1 (2006-10) for the DR1200 JN5168-001-M05 10dBm Module and DR1198 JN5168-001-U00 USB Dongle  EN 300 328 v1.8.1 (2012-04) for the DR1180 JN5168-001-M03 Module and DR1178 JN5168-001-M00 Module  EMC:  ETSI EN 301 489-17 V2.1.1 (2009-05) ETSI EN 301 489-1 V1.8.1 (2008-04)  Safety:  EN 60950-1:2006 +A11:2009 +A1:2010
CONFORMITY ASSESSMENT PROCEDURE:	Annex IV Technical Construction File

List of Approved Antennas:

	Brand	Model Number	Description	Gain (dBi)	Connector type
1	Antenna Factor	ANT-2.4-CW-RCT-SMA	Vertical - knuckle antenna	2.2	SMA
2	Antennova	B6090	Vertical - knuckle antenna	2.2	RP-SMA
3	Hyperlink Technology	HG2402RD-RSF	Vertical - knuckle antenna	2.2	RP-SMA
4	Aveslink Technology, Inc	E-0005-AC	Vertical- flying lead	2	RP-SMA
5	Aveslink Technology, Inc	E-2411-GC	Vertical - swivel	2	RP-SMA
6	Aveslink Technology, Inc	E-2410-CA	Vertical - bulkhead- flying lead	2	uFL
7	Aveslink Technology, Inc	E-2410-GC	Vertical - swivel	2	RP-SMA
8	Aveslink Technology, Inc	E-2820-CA	Vertical - bulkhead- flying lead	2	uFL
9	Aveslink Technology, Inc	E-2820-GC	Vertical - swivel	2	RP-SMA
10	Embedded Antenna Design	FBKR35068-RS-KR	Vertical - knuckle antenna	2	RP-SMA
11	Nearson	S131CL-L-PX-2450S	Vertical - knuckle-flying lead	2	uFL
12	Laird Technologies	WRR2400-IP04	Vertical - knuckle-flying lead	1.5	uFL
13	Laird Technologies	WRR2400-RPSMA	Vertical - knuckle-flying lead	1.3	RP-SMA
14	Aveslink Technology, Inc	E-6170-DA	Vertical - right angle	1	uFL
15	Laird Technologies	WCR2400-SMRP	Vertical - knuckle antenna	1	RP-SMA

The Technical Construction File to which this document relates has been assessed and in the opinion of the undersigned Notified Body is found to conform to article 3 (Excluding SAR) the essential requirements of Council Directive 1999/5/EC on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

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