

FCC Part 15D - APPLICATION FORM & SELF-DECLARATION

ETC

Applicant Name	SMC NETWORK		
Address	20 Mason Irvine, CA 92618		
Contact person	Tobias Schwartz		
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Manufacturer Name	SMC NETWORKS Inc.		
Address	20 Mason Irvine, CA 92618		

	PP	FP
FCC ID	J15-D81CH	J15-D3USG
Model Number	D81CH	SMCD3USG
HW version	Version B	R0D
SW version	CK001USB-2133-4050-003	0.5.0.3
Antenna Type	Mono Pole	Metal Patched Inverted-F Antenna
Max. Antenna Gain (dBi)	0dBi	1.16 dBi 1.32 dBi
Mains Power Voltage	Charger adaptor Input : AC100V to 240V Output : DC5V 500mA	
Battery Voltage	DC 3.6 V	

Number of channels	5				
Carriers frequency(MHz)	1921.536	1923.264	1924.992	1926.720	1928.448
Nominal Receive Bandwidth	+/- 500 kHz				
Frame period (ms)	10				
Timeslot Plan	24 timeslots per frame. First 12 timeslots used for PP transmissions and other 12 timeslots used for FP transmissions.				
Burst Length Range (us)	Min	90	Max	390	
Operating Temperature Range (°C)	Min	0	Max	50	

Does a system built with the EUT that implement the provisions of 47CFR 15.323(c)(5) enabling the use of the upper threshold for deferral?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
According to 47CFR15.323(c)(5), does your model not use bandwidth in further cooperation with other devices at any range?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
Does a system built using the EUT that operate under the provisions of 47CFR 15.323(c)(6) incorporating provisions for waiting for a channel to go clear?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																
According to 47CFR15.323(c)(8), does EUT use the same antennas for transmission and reception as for monitoring?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
Does a system built with the EUT that operate under the provisions of 47CFR 15.323(c)(10) to test for deferral only in conjunction with a companion device?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																
Does a system built using the EUT that operate under the provisions of 47CFR 15.323(c)(11) enabling the access criteria check on the receive channel while in the presence of collocated interferers?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No																																
According to 47CFR15.323(c)(12), does EUT not work in a mode with denies fair access to spectrum for other devices.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
Does your model have the monitoring made through the radio receiver used for communication?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
Does your model transmit control and signaling channels?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
According to 47CFR15.307(b), does the applicant have the affidavit from UTAM Inc.?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
According to 47CFR15.319(b), do all transmissions use only digital modulation techniques?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No																																
The provisions within the EUT for self-check by which compliance with 47CFR15.319(f) is obtained:	<table border="1"> <tr> <td>A - Connection break down, cease of transmit</td> <td>Situation</td> <td colspan="2">Reaction of EUT</td> </tr> <tr> <td>B - Connection break down, EUT transmits signaling information</td> <td>Switch-off compare device</td> <td>FP</td> <td>PP</td> </tr> <tr> <td>C - Connection break down, compare device transmits signaling information</td> <td>Hook-on by compare device</td> <td>B</td> <td>A</td> </tr> <tr> <td>N - Not possible</td> <td>Switch-off by EUT</td> <td>B</td> <td>N</td> </tr> <tr> <td></td> <td>Hook-on at EUT side</td> <td>A</td> <td>A</td> </tr> <tr> <td></td> <td>Remove Power from EUT</td> <td>N</td> <td>A</td> </tr> <tr> <td></td> <td>Remove Power from compare device</td> <td>A</td> <td>A</td> </tr> <tr> <td></td> <td></td> <td>B</td> <td>A</td> </tr> </table>	A - Connection break down, cease of transmit	Situation	Reaction of EUT		B - Connection break down, EUT transmits signaling information	Switch-off compare device	FP	PP	C - Connection break down, compare device transmits signaling information	Hook-on by compare device	B	A	N - Not possible	Switch-off by EUT	B	N		Hook-on at EUT side	A	A		Remove Power from EUT	N	A		Remove Power from compare device	A	A			B	A
A - Connection break down, cease of transmit	Situation	Reaction of EUT																															
B - Connection break down, EUT transmits signaling information	Switch-off compare device	FP	PP																														
C - Connection break down, compare device transmits signaling information	Hook-on by compare device	B	A																														
N - Not possible	Switch-off by EUT	B	N																														
	Hook-on at EUT side	A	A																														
	Remove Power from EUT	N	A																														
	Remove Power from compare device	A	A																														
		B	A																														

DECLARED BY:

5/12/2010
5/12/10
Date

Toby Schwartz
Name (print)

Signature & Chop

ELECTRONICS TESTING CENTER, TAIWAN

NO. 8 LANE 29, WENMING RD., LESHAN TSUEN, GUISHAN SHIANG, TAoyuan COUNTY 33383, TAIWAN, R. O. C.
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NOTE:**FCC Part 15.323(c)(5)**

If access to spectrum is not available as determined by the above, and a minimum of 40 duplex system access channels are defined for the system, the time and spectrum windows with the lowest power level below a monitoring threshold of 50 dB above the thermal noise power determined for the emission bandwidth may be accessed. A device utilizing the provisions of this paragraph must have monitored all access channels defined for its system within the last 10 seconds and must verify, within the 20 milliseconds (40 milliseconds for devices designed to use a 20 milliseconds frame period) immediately preceding actual channel access that the detected power of the selected time and spectrum windows is no higher than the previously detected value.

The power measurement resolution for this comparison must be accurate to within 6 dB. No device or group of co-operating devices located within 1 meter of each other shall during any frame period occupy more than 6 MHz of aggregate bandwidth, or alternatively, more than one third of the time and spectrum windows defined by the system.

FCC Part 15.323(c)(6)

If the selected combined time and spectrum windows are unavailable, the device may either monitor and select different windows or seek to use the same windows after waiting an amount of time, randomly chosen from a uniform random distribution between 10 and 150 milliseconds, commencing when the channel becomes available.

FCC Part 15.323(c)(8)

The monitoring system shall use the same antenna used for transmission, or an antenna that yields equivalent reception at that location.

FCC Part 15.323(c)(10)

An initiating device may attempt to establish a duplex connection by monitoring both its intended transmit and receive time and spectrum windows. If both the intended transmit and receive time and spectrum windows meet the access criteria, then the initiating device can initiate a transmission in the intended transmit time and spectrum window. If the power detected by the responding device can be decoded as a duplex connection signal from the initiating device, then the responding device may immediately begin transmitting on the receive time and spectrum window monitored by the initiating device.

ANSI C63.17 § 8.3

To comply with 47CFR15.323(c)(10), the EUT must monitor both its transmit time/spectrum window and its receive time/spectrum window.

FCC Part 15.323(c)(11)

An initiating device that is prevented from monitoring during its intended transmit window due to monitoring system blocking from the transmissions of a co-located (within one meter) transmitter of the same system, may monitor the portions of the time and spectrum windows in which they intend to receive over a period of at least 10 milliseconds. The monitored time and spectrum window must total at least 50 percent of the 10 millisecond frame interval and the monitored spectrum must be within 1.25 MHz of the center frequency of channel(s) already occupied by that device or collocated co-operating devices. If the access criteria is met for the intended receive time and spectrum window under the above conditions, then transmission in the intended transmit window by the initiating device may commence.

FCC Part 15.323(c)(12)

The provisions of (c)(10) or (c)(11) shall not be used to extend the range of spectrum occupied over space or time for the purpose of denying fair access to spectrum to other devices.

FCC Part 15.307(b)

Each application for certification of equipment operating under the provisions of this Subpart must be accompanied by an affidavit from UTAM, Inc. certifying that the applicant is a participating member of UTAM, Inc. In the event a grantee fails to fulfill the obligations attendant to participation in UTAM, Inc., the Commission may invoke administrative sanctions as necessary to preclude continued marketing and installation of devices covered by the grant of certification, including but not limited to revoking certification.

FCC Part 15.319(b)

The requirements of Subpart D apply only to the radio transmitter contained in the PCS device. Other aspects of the operation of a PCS device may be subject to requirements contained elsewhere in this Chapter. In particular, a PCS device that includes digital circuitry not directly associated with the radio transmitter also is subject to the requirements for unintentional radiators in Subpart B.

FCC Part 15.319(f)

The device shall automatically discontinue transmission in case of either absence of information to transmit or operational failure. These provisions are not intended to preclude transmission of control and signaling information or use of repetitive codes used by certain digital technologies to complete frame or burst intervals.

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