

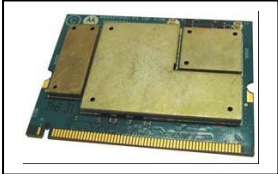
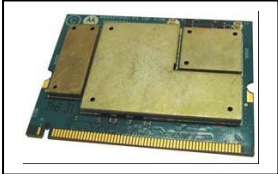
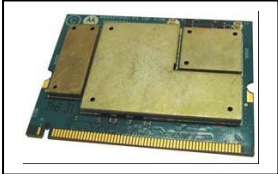
 MOTOROLA	 ACCREDITED Certificate Number: 1449-01			
FCC ID: AZ489FT7023 DECLARATION OF COMPLIANCE MPE ASSESSMENT				
Network & Enterprise Mobility Solutions EME Test Laboratory 8000 West Sunrise Blvd Fort Lauderdale, FL. 33322	Date of Report: May 24, 2006 Report Revision: Rev. A Report ID: FCC MPE rpt_WDE1100_Rev A_060524 SR4102			
<table border="0"> <tr> <td style="vertical-align: top;"> Responsible Engineer: Date/s Tested: Manufacturer/Location: Date submitted for test: DUT Description: Test TX mode(s): Max. Power output: TX Frequency Bands: Signaling type: Model(s) Tested: Model(s) Certified: Serial Number(s): Classification: Rule Part(s): </td> <td style="vertical-align: top;"> Kim Uong (EME Engineer) N/A (MPE-Numerical assessment) Motorola, Israel 5/18/06 WDE1100 - Wireless Device Enabler 4.9GHz (802.11a); 2.4GHz (802.11b/g) N/A (MPE-Numerical assessment) 0.126W for 4.9GHz, 0.071W for 2.4GHz 4942.5 – 4987.5 MHz and 2412 - 2462 MHz OFDM @ 4.9GHz; DSSS and OFDM @ 2.4GHz. N/A (MPE-Numerical assessment) F2892A NA General Population/Uncontrolled 90 </td> <td style="vertical-align: middle; text-align: center;">  </td> </tr> </table>		Responsible Engineer: Date/s Tested: Manufacturer/Location: Date submitted for test: DUT Description: Test TX mode(s): Max. Power output: TX Frequency Bands: Signaling type: Model(s) Tested: Model(s) Certified: Serial Number(s): Classification: Rule Part(s):	Kim Uong (EME Engineer) N/A (MPE-Numerical assessment) Motorola, Israel 5/18/06 WDE1100 - Wireless Device Enabler 4.9GHz (802.11a); 2.4GHz (802.11b/g) N/A (MPE-Numerical assessment) 0.126W for 4.9GHz, 0.071W for 2.4GHz 4942.5 – 4987.5 MHz and 2412 - 2462 MHz OFDM @ 4.9GHz; DSSS and OFDM @ 2.4GHz. N/A (MPE-Numerical assessment) F2892A NA General Population/Uncontrolled 90	
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Based on the information provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the FCC standard 47 CFR §1.1310. This report shall not be reproduced without written approval from an officially designated representative of the Motorola EME Laboratory.				
Signature on file - Stephen Whalen for Ken Enger Ken Enger GEMS EME Lab Senior Resource Manager, Laboratory Director, Approval Date: 5/24/06	Certification Date: 5/24/06 Certification No.: L1060538			

TABLE OF CONTENTS

1.0	Product and System Description
2.0	Evaluation methods
3.0	MPE Analysis
4.0	Conclusion

REVISION HISTORY

Date	Revision	Comments
5/8/06	O	Original release
5/24/06	A	Revise max power for 2412 – 2462MHz frequency band.

1.0 Product and System Description

The WDE1100 model F2892A FCC ID AZ489FT7023 is an OEM module that is capable of operating in the 4942.5-4987.5MHz (802.11a); and 2412-2462MHz bands (802.11b/g). The rated conducted power is 0.1 Watt for 4942.5-4987.5MHz; 0.063W for 2412-2462MHz. The maximum conducted output power is 0.126 Watts and 0.071 Watts respectively as defined by the upper limit of the production line final test station. The transmitters listed above, 802.11a and 802.11b/g, will not transmit simultaneously. Motorola neither manufactures nor supplies the antenna(s) and host housing(s) that will be used in future systems integrations.

The User manual for this product instructs the Systems Integrator to assure that transmission occurs only when the operator and nearby persons are at least 20 cm from the antenna. Therefore, this product will be evaluated as a mobile device per 47 CFR §1.1310 titled "Radio frequency radiation exposure limits", generally referred to as Maximum Permissible Exposure (MPE) limits, for General Population.

2.0 Evaluation methods:

MPE numerical assessment is used to evaluate the RF exposure of this WDE1100 OEM module based on a maximum antenna gain of 6dBi for 2412 – 2462MHz band and 9dBi for 4942.5 – 4987.5MHz band.

According to OET Bulletin 65 Edition 97-01 Section 2, calculations can be made to predict RF field strength and power density levels around typical RF sources. For example, in the case of a single radiating antenna, a prediction for power density in the far-field of the antenna can be made by use of the general Equations (3) or (4) below. These equations are generally accurate in the far-field of an antenna but will over-predict power density in the near field, where they could be used for making a "worst case" or conservative prediction.

$$S = \frac{PG}{4\pi R^2} \quad (3)$$

Where: S = power density (mW/cm²)

P = power input to the antenna (mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (cm)

Or

$$S = \frac{EIRP}{4\pi R^2} \quad (4)$$

Where: EIRP = equivalent (or effective) isotropically radiated power

3.0 MPE Analysis:

Max Antenna Gain	Max power (W)	Frequency Range (MHz)	Distance (cm)	Radiated power density (mW/cm ²)	(*)Radiated power density for a perfect reflecting ground plane (mW/cm ²)	Specification Limit - FCC Max Permissible Exposure (mW/cm ²)	
						Uncontrolled	Controlled
6 dBi	0.071	2412 - 2462	20	0.06	0.22	1	5
9 dBi	0.126	4942.5 - 4987.5	20	0.20	0.80	1	5

Note: (*) A perfect reflecting ground plane, in-phase field combination is assumed, resulting in a four-fold power density increase.

4.0 Conclusion:

The MPE results for WDE1100 per the assessment above are compliant to the FCC General population/Uncontrolled exposure limits of 1 mW/cm² for the frequency ranges above 1500MHz per 47 CFR §1.1310 titled “Radio frequency radiation exposure limits”.