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EMI COMPLIANCE REPORT

CERTIFICATION to FCC PART 15.247 & RSS 210

FCC ID: EJE-WB0001

Industry Canada ID: IC: 337J-WB0001

Test Sample: LIFEBOOK Ginger with Callexico WLAN
& Bluetooth device

Model Number/s: S6120D, S6130

Tested for: Fujitsu Australia Ltd

Report Number: M030807_Certification_Ginger2/3_CalWB

Issue Date: 29th August 2003

Authorised Signatory:

A handwritten signature in black ink, appearing to read "Chris Zombolas", written over a horizontal line.

Chris Zombolas
Technical Director
EMC Technologies Pty Ltd

EMC Technologies Pty Ltd reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. EMC Technologies Pty Ltd shall have no liability for any deductions, inferences or generalisations drawn by the client or others from EMC Technologies Pty Ltd issued reports. This report shall not be used to claim, constitute or imply product endorsement by EMC Technologies Pty Ltd.



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EMC COMPLIANCE REPORT

CERTIFICATION to FCC PART 15.247 & RSS-210

1. INTRODUCTION

This report documents the compliance of LIFEBOOK S Series, Model S6120D (Ginger2) and Model S6130 (Ginger3) notebook PC configured with radio devices (Calexico WLAN module) and ALPS Bluetooth device.

Compliance is based on the test results of LifeBook S Series notebook PC (S6120/S6120D – Ginger) with identical Calexico & Bluetooth combination previously tested by EMC Technologies Pty Ltd. Testing was performed in accordance with the Federal Communications Commission (FCC) regulations as detailed in Title 47 CFR, Part 15 Subpart C Rules for intentional radiators, particularly Section 15.247 (Operation in the frequency band 2400 - 2483.5 MHz).

The test sample was FCC certified on the 27th May 2003 with the Grantee registered as Fujitsu Australia Ltd (FCC ID: QK3-WB0001).

Please refer to EMC Technologies Report - M030507R_Certification_Ginger_CalWB and Appendices for details of the test sample and test results.

According to the LifeBook manufacturer (Fujitsu Ltd. Japan) the LifeBook/WLAN/Bluetooth combination previously tested and certified is representative of the LifeBook/WLAN/Bluetooth combinations outlined below.

The intention of this report is to therefore justify the compliance and certification of the same Calexico+Bluetooth combination in identical notebooks Ginger2 and Ginger3, based on this previous approval.

The differences in the certified models and the new models are:

No differences in the certified models and the new models are:

Difference	Certified Model	New Model	Comments
GRANTEE CHANGE	QK3 (Fujitsu Australia Ltd.)	EJE (Fujitsu Limited.)	New application
FCC ID:	QK3-WB0001	EJE-WB0001	
Canada ID:	337H-WB0001	337J-WB0001	
Calexico WLAN module	WM3B2100	WM3B2100	NO CHANGE
Bluetooth	ALPS	ALPS	NO CHANGE
WLAN Operation and specifications physical, mechanical and electrical	NO CHANGE		
Bluetooth Operation, specifications physical, mechanical and electrical	NO CHANGE		
HOST Notebook Model	Ginger: S6120/S6120D	Ginger2: S6120D Ginger3: S6130	New Range models
HOST Notebook Model Specifications	CPU Speed: 1.6 GHz 10/100 Base Wired LAN DDR (RAM access Speed) = 266 MHz	CPU Speed: 1.7 GHz Ginger3: 1000Base Wired LAN Ginger3: DDR (RAM access Speed) = 333 MHz	Minor change
	AC Adapter: CA01007-0850		
	Physical construction: Identical		
	Ports available: Identical		
	LCD Screen Types: Identical		



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2. GENERAL INFORMATION

(Information supplied by the Client)

2.1 Product Details

Test Sample:	LIFEBOOK S Series
Codename/Model Name:	Ginger2: S6120D Ginger3: S6130
Manufacturer:	Fujitsu Ltd.
CPU Type and Speed:	Pentium-M 1.7GHz
SDRAM:	256 MB
LCD Screen:	13.3"XGA
Hard Disk Drive:	30 GB
DDR:	266 MHz / 333 MHz
LAN:	Broadcom GbLAN (On Board) (1000 Base wired LAN)
Modem:	MBH7MD35 and MBH7MD33
Port Replicator Model:	FPCPR38 / FPCPR38AP
WLAN Module:	Calexico WM3B2100
Bluetooth:	ALPS Bluetooth
AC Adapter :	CA01007-0850

Volts	Adapter Spec		Model Number:	Alternate Model Number
	Amps	Watts		
16	3.75	60	SEB80N2-16.0	CA01007-0850
			UJ88	CA01007-0870

2.2 Test Sample Operational Description

The EUT (Equipment Under Test) is a notebook PC, model: Ginger2 S6120D and Ginger3 S6130 with two radio devices. Mini-PCI Wireless LAN (WLAN) Module (Calexico WM3B2100) and ALPS Bluetooth device that are factory configured during production of Fujitsu Notebook PCs (LifeBooks).

The Calexico module is an OEM product from Intel Corp., which has been FCC certified under **modular approval** (FCC ID: PD9WM3B2100) (Report Number: INTEL-021001F)

Curtis-Straus TCB has individually certified the ALPS Bluetooth device used in Ginger S6120/S6120D (FCC ID: QK3-BT0001) (Report Number: EMC Technologies-M030235_FCC_Ginger_BT)

Curtis-Straus TCB has certified the same Calexico+Bluetooth combination transmitters in Ginger S6120/S6120D (FCCID: QK3-WB0001) (Report Number EMC Technologies - **M030507R_Certification_Ginger_CalWB**)

Industry Canada has certified the same Calexico+Bluetooth combination transmitters in Ginger S6120/S6120D (IC ID: 337H-WB0001) (Report Number EMC Technologies - **M030507R_Certification_Ginger_CalWB**)



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2.3 Technical Specifications

Transmitter Specifications:

Transmitter#1:

Wireless Module:	Calexico
Model Number:	WM3B2100
Manufacturer:	Intel Corporation
Interface Type:	Mini-PCI Module
Network Standards:	IEEE 802.11b
Modulation Type:	Direct Sequence Spread Spectrum (DSSS)
Maximum Data Rate:	11Mbps max
Frequency Range:	2400 MHz to 2483.5 MHz (Operational range 2402 to 2462 MHz)
Number of Channels:	14 maximum (Operational channels = 11)
Antenna Type:	Monopole Ceramic chip Antenna
Output Power:	16 dBm typical
Power Supply:	3.3 VDC from PCI bus.

Transmitter#2:

Module:	ALPS Bluetooth Module
Manufacturer:	ALPS
Network Standard:	Bluetooth™ RF Test Specification
Modulation Type:	Frequency Hopping Spread Spectrum (FHSS)
Frequency Range:	2402 MHz to 2480 MHz
Number of Channels:	79
Carrier Spacing:	1.0 MHz
Antenna Types:	Monopole Ceramic Chip Antenna
Reference Oscillator:	16 MHz (Built-in)
Power Supply:	3.3 VDC from host.

EUT Host Details:

Test Sample	LIFEBOOK S Series
Model Number:	S6120, S6130D
Codename:	Ginger2 / Ginger3
CPU Speed:	1.7 GHz
Manufacturer:	Fujitsu Ltd.
AC Adapter Model:	CA01007-850
	16VDC, 3.75A, 60W

