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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

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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: Callexico
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

