

Plug and Play Wireless CPU[®]

Delta between M1306B and Fastrack Supreme

Reference: WA_DEV_Fastrk_UGD_004

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1.0	23 Feb, 07	Creation	MLO
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	Name	Function	Date	Signature
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Contents

1	INTRODUCTION	4
2	DELTA BETWEEN M1306B & SUPREME.....	4
2.1	Product Specification Delta	4
2.2	Mechanical Delta	5
2.2.1	Front View	5
2.2.2	Back view	6
2.2.2.1	Comparison between M1306B and Supreme.....	6
2.2.2.2	Additional Possible IESM Plug In for Supreme	6
2.3	Electrical Delta.....	7
2.3.1	Voltage Level for BOOT and RESET Signals on SubD 15-pin Connector Output	7
2.3.2	GPIO on Micro-Fit Connector Output	7
2.3.3	Additional RTC Battery Backup Feature	7
2.3.4	SIM Voltage	7
2.3.5	Serial Port Auto Shut Down.....	7
2.3.6	Additional IES Interface.....	8
2.4	Software Supported Feature Delta.....	9
3	REFERENCE DOCUMENT.....	9

1 INTRODUCTION

This document gives the brief comparison between the new generation Fastrack Supreme Plug & Play and the previous generation M1306B. It is an useful information for the current M1306B customer when they want to replace their M1306B Plug & Play by the new generation **Fastrack Supreme 10 or 20**.

2 DELTA BETWEEN M1306B & **FASTRACK SUPREME**

2.1 Product Specification Delta

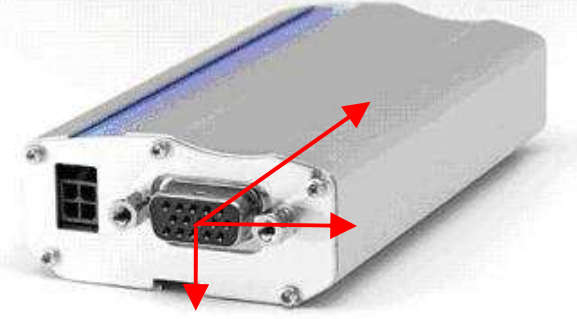
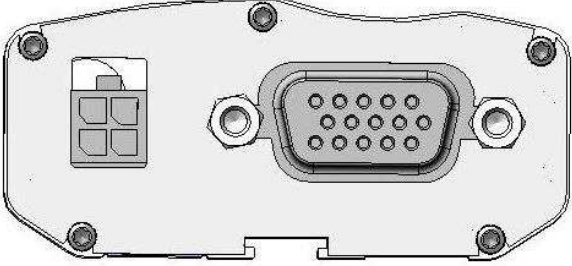
FEATURE		Plug & Play		
		M1306B	Fastrack Supreme 10	Fastrack Supreme 20
EGPRS Class 10		X	X	√
1.8V SIM		X	√	√
SIM card Lock		X	√	√
GSM850/PCS1900 band available for use (Remark: no FCC/PTCRB on Plug & Play)		X	√	√
RTC back up battery		X	√	√
Serial Port AutoShutDown		X	√	√
Temperature Range	Class A ^{Note 1}	-20°C ~ +55°C	-20°C ~ +55°C	-20°C ~ +55°C
	Class B ^{Note 2}	--	-30°C ~ +85°C	-30°C ~ +85°C
	Storage	-25°C ~ +70°C	-40°C ~ +85°C	-40°C ~ +85°C
IESM flexibility		X	√	√

Note 1 : Compliant to full GSM specification

Note 2 : Operational, to establish a voice, SMS or DATA call (temperature range is subjected to be changed depending on the final performance after the qualification)

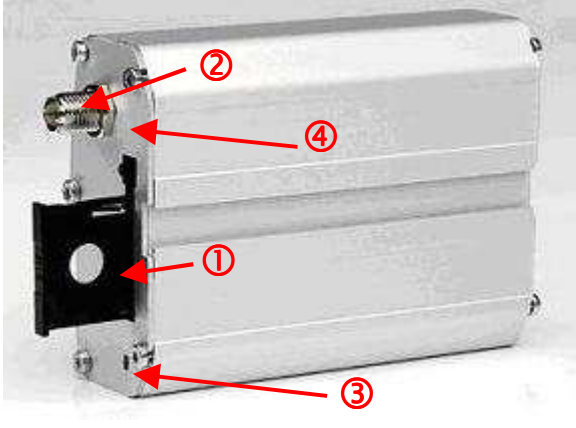
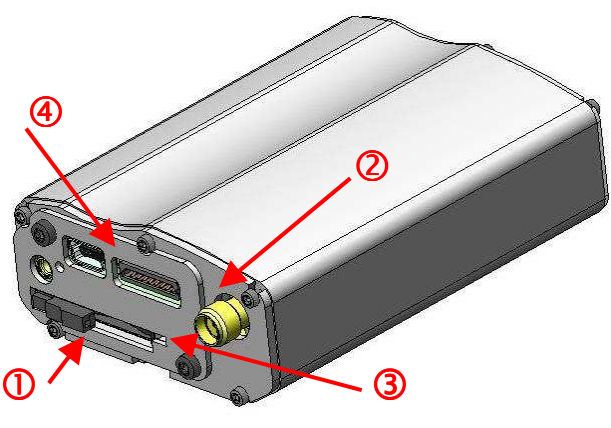
2.2 Mechanical Delta

2.2.1 Front View

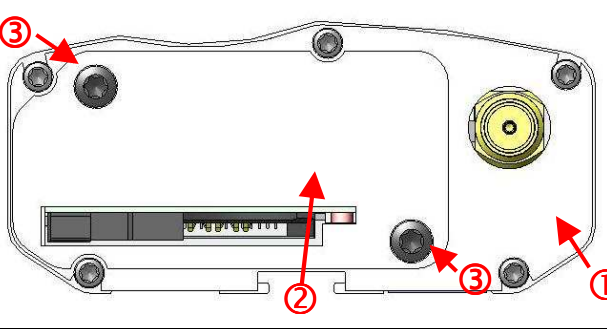
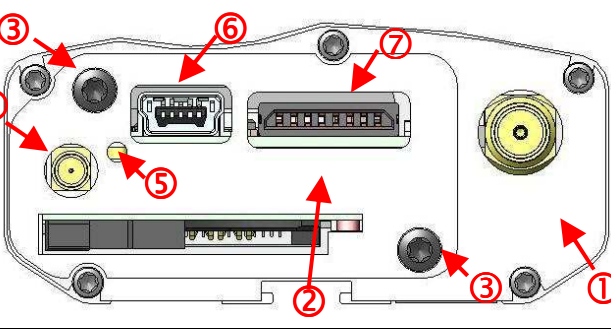
M1306B	Fastrack Supreme
	
1. SubD 15-Pin connector position shift as from M1306B indicated as above	

2.2.2 Back view

2.2.2.1 Comparison between M1306B and Fastrack Supreme

M1306B	Fastrack Supreme
	
<p>1. SIM Connector type & location change, Fastrack Supreme now has no card holder, but with lock</p>	
<p>2. GSM RF connector type change for Fastrack Supreme, with no more torque issue as M1306B, with position shift</p>	
<p>3. GSM LED indicator position change</p>	
<p>4. Additional back plate on top of the back cap of Fastrack Supreme, for IESM Plug In (Refer to coming Section 2.2.2.2)</p>	

2.2.2.2 Additional Possible IESM Plug In for Fastrack Supreme.

Stand Alone Fastrack Supreme without any IESM Plug In	Fastrack Supreme with possible IESM Plug In
	
<p>1. Common back cap</p>	
<p>2. Back plate depends on IESM Plug In type</p>	
<p>3. Screw for fixing back plate</p>	
<p>4. MMCX connector for GPS/Bluetooth, depending on IESM Plug In type</p>	
<p>5. LED indicator for GPS/Bluetooth, depending on IESM Plug In type</p>	
<p>6. USB connector for UART2</p>	
<p>7. 16 pin I/O connector</p>	

2.3 Electrical Delta

2.3.1 Voltage Level for BOOT and RESET Signals on SubD 15-pin Connector Output

SubD 15-pin Connector Pin no.	Signal	M1306B	Fastrack Supreme
3	BOOT	2.8V	1.8V
14	RESET	2.8V	1.8V

2.3.2 GPIO on Micro-Fit Connector Output

There are 2 GPIOs available on the Micro-Fit Connector output for both M1306B and Fastrack Supreme Plug & Play but the GPIO mapping and reset status is difference.



Micro Fit Connector Pin no.	M1306B		Fastrack Supreme	
	Signal	Reset Status	Signal	Reset Status
3	GPIO4	Low	GPIO21	Undefined
4	GPIO5	Low	GPIO25	Z

2.3.3 Additional RTC Battery Backup Feature

Fastrack Supreme Plug & Play has additional RTC battery for which it keeps the time data after power removal.

2.3.4 SIM Voltage

SIM Voltage	M1306B	Fastrack Supreme
3V	√	√
1.8V	X	√

2.3.5 Serial Port Auto Shut Down

Fastrack Supreme Plug & Play implement the Serial Port Auto Shut Down feature, for improving the power consumption when there is no data communication between the Plug & Play and the DTE.

2.3.6 Additional IES Interface

Fastrack Supreme Plug & Play provide an additional IES Interface for customer to expand the application features like GPS, I/O expander, Bluetooth..., etc. It is a 50 pin interface including GPIOs, SPI, UART, PCM, USB, Interrupt and various voltage supplies. For detail, please refer to document [1].

2.4 Software Supported Feature Delta

Feature	Plug & Play		
	M1306B	Supreme 10	Supreme 20
Open AT Plug-In compatibility	X	√	√

3 REFERENCE DOCUMENT

- [1] IESM CDG (WA_XXX...) (TBD)
- [2] FASTRACK Supreme IESM-GPS+USB User Guide : WA_DEV_Fastrk_UGD_002
- [3] IESM board installation Guide (WA_XXX...) (TBD)