Product Specification for Business PDA

SL-6000N/SL-6000D/SL-6000L/SL-6000W

CE-JC	CF expansion jacket
EA-BL09	Lithium polymer rechargeable battery
CE-ST10	Cradle
EA-70	AC adapter

Second version
October 1, 2003

SHARP

Contents

Purpose of the planning

There is a tendency that PDA market is polarized into two extremes which are low-price models such as DELL and high-end models with wireless LAN or Bluetooth features. Especially in business PDA segment, network connection via wireless LAN and connection with peripherals or cellular phones (specifically in overseas) via Bluetooth are highly demanded, so that models with both features are getting a lot more attention.

This model will be commercialized as a PDA exclusively for business purposes with "readiness," "expandability" and "reliability" that offer most appropriate mobile office solution for business use in enterprise, in addition to the support for wireless communications.

Characteristics

Integrates with semi-transmissive 4-inch high resolution CG silicone VGA LCD

Semi-transmissive screen makes it easy to see in both outside and inside (with backlight on)

Easy to see information on the list, and easy to operate with a stylus

Base application will allow common site planning with a PC

Landscape view is available. Switchable between landscape and portrait views according to contents and applications.

Slide keyboard

Built-in slide keyboard for easy and quick text entry such as writing e-mail texts

Built-in wireless LAN and Bluetooth

Combination of built-in wireless LAN and Bluetooth. Bluetooth is for connection with small business printer or barcode reader. Wireless LAN is for connection with network.

Great expandability with CF　SD slot, USB host and expansion jacket

CF expansion jacket to be combined with the main unit (battery included)

USB host allows connection with various peripherals such as barcode scanner and PHS connection cable

Uses Linux/Java platform

Linux/Java open platform that provides rich software resources is used

Flash file system and ruggedised design to eliminate worries about data loss

Uses Flash file system in which user data pr user programs will not be lost even battery dies

Built-in sub battery for system backup to keep operation status while replacing batteries and to start the operation again right after replacement

Ruggedised design to offer 1-meter drop resistance (on concrete surface)

Main unit model variation

	Wireless LAN	Bluetooth	Flash	RAM
SL-6000N			64MB	64MB
SL-6000D			128MB	64MB
SL-6000L	X		64MB	64MB
SL-6000W	X	X	64MB	64MB

Exterior image

Main unit exterior image

CF slot
SD slot
Stylus

Indicator (W-LAN, Bluetooth, Mail, Charge)

Speaker
Bottom

Power button

IR port

Voice recorder button

Headphone/microphone jack

Microphone Bottom

DC-IN

Expansion port (80 pin)

16 pin I/O port for cradle

USB host (mini-A type)

OK button

Backlight view direction 90-degree switch button
to be used when using the unit horizontally

Exterior image when CF expansion jacket is attached

(mainly for software developers)

(for connection with CE-170TS)

Replaceable rechargeable battery

The same battery as the one used in the main unit

5. System Configuration
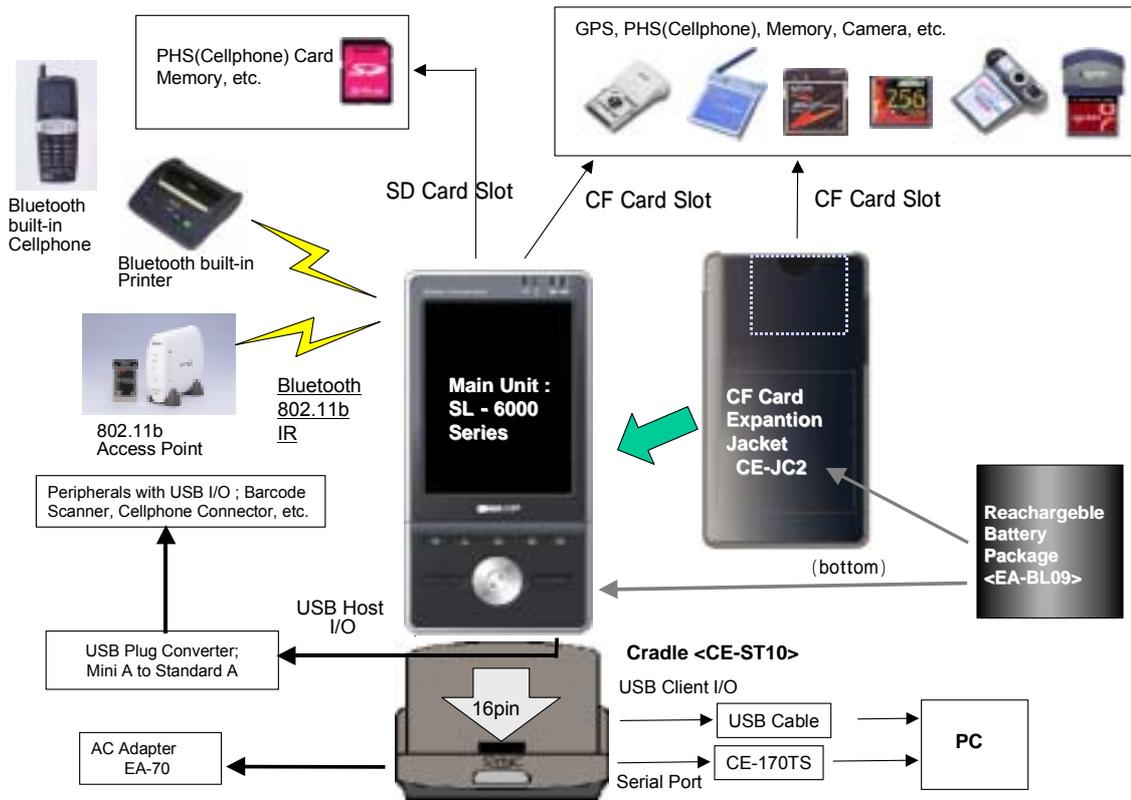
New/Existing	Model number	Product name	Remarks
New	SL-6000N SL-6000D SL-6000L SL-6000W	Personal mobile tool (Main unit)	EA-BL09, EA-70, display protection cover are included
New in Japan	EA-70	AC adapter	One included with the main unit
New	EA-BL09	Lithium polymer rechargeable battery	One included with the main unit
New	CE-ST10	Cradle	USB cable (1.5 meters) included
New	CE-JC2	CF expansion jacket	EA-BL09 included
Existing	imitation part	USB mini A → Standard A conversion cable	Imitation part (from Mitsumi Electronics) recommended
Existing	CE-170TS	Serial conversion cable	Existing option for Zaurus

Specification

Item			Model number			
			SL-6000N	SL-6000D	SL-6000	SL-6000W
			Embedded Linux			
			Intel PXA255 processor　400MHz			
Memory	Flash-ROM		64MB	128MB	64MB	64MB
	RAM		64MB			
Display system			4-inch semi-transmissive CGS color LCD (with backlight)			
Pixel / number of colors			480×640-dot, 65,536-color			
Touch-sensitive display			Analog resistance film system touch-sensitive panel			
Keys / buttons	Side		Power button, REC button			
	on movable side		14 keys (9 keys, 4 cursor keys and one center key)			
	on fixed side		37 keys (QWERTY keyboard)			
Card slot			CF card slot　TYPE　×1, SD card slot ×1			
Optical communication interface			IrDA Ver1.2　115kbps			
Wireless LAN					built-in 802.11b	built-in 802.11b
Bluetooth						built-in
host terminal			1　mini A type			
Earphone / microphone terminals			1　2.5φ　3-prong　Connection to earphone-microphone or stereo headphone is available			
I/O port			1　16-pin for connection with optional cradle CE-ST10			
Expansion bus			1　80-pin for connection with optional expansion jacket CE-JC2			
Audio			Built-in speaker and microphone			
	Charged		Charging indicator			
	Open line		E-mail arrival	E-mail arrival	E-mail arrival Wireless LAN	E-mail arrival Wireless LAN Bluetooth
Power source			Lithium polymer rechargeable battery <EA-BL09>*1			
			Sub battery (for system backup (including RTC and RAM): for about 10 minutes)			
External size (excluding projections)			About 79.8mm (L) × about 158mm (W) × about 20.4mm(H)			
Weight			About 250g　including batteries and stylus　target			
Drop resistance			1m　on concrete surface　target　*2			
Working temperature / humidity			0　40C, 20　90　RH　no condensation			
Storage temperature / humidity			-20　60C, 5　95　RH　no condensation			
Software			Described separately			
to be included with shipment			Display protection cover, one rechargeable battery (EA-BL09), AC adapter　EA-70 , AC cord, stylus (attached to the main unit), CF slot protection card (attached to the main unit), I/O port cover (attached to the main unit), setup guide, instruction manual, list of customer centers, guarantee certificate			

*1: The power of rechargeable battery is consumed in order to backup RAM and RTC (clock function) even when the main unit is turned off.

Even after the battery is fully charged and the unit is not used at all, it will be completely dead about 15 days after.

*2: According to our test standard

No damage on the structure is found and Flash memory is protected after the main unit of SL-6000 itself and the one with a jacket (when the power is off) are dropped from 1 meter high to a flat concrete surface, twice with 6 of each side down.

This is only the standard for quality check test, and does not guarantee safety after being dropped repeatedly.

Battery life　target

Operation mode	Backlight	Battery life (hour)
Displaying calendar (continuous display)	OFF	About 12.0
	45	About 5.0
	MAX	About 4.0
Calendar search (5 minutes: 55minutes)	OFF	About 11.0
	MAX	About 3.5
Wireless LAN　continuous communication	MAX	About 1.5
Wireless LAN 10　access	MAX	About 2.0
Wireless LAN standby	OFF	About 5.0
Bluetooth　10　access	MAX	About 2.5
PHS(continuouscommunication)	MAX	About 2.0
Keeping clock and RAM	(The main unit is turned off)	About 15 days

Displayed Items on the Main Unit

Location	Mentioned Items
Front	Company name: "SHARP" logo mark CG Silicon logo mark Wireless LAN indicator: (symbol: antenna icon) Bluetooth indicator: (symbol: Bluetooth logo mark) E-mail arrival indicator: (symbol: envelope icon) Charging indicator: (symbol: battery and arrow icon) Slide cover key area　See the key layout below
Top	SD card slot: "SD Card"
Left	Power button: (symbol: standby icon) Record button: "REC" Audio terminal: (symbol: headphone icon)
Bottom	DC-IN jack: (symbol: DC power icon) USB terminal: (symbol: USB icon) Reset switch area: "RESET"
Back	C card slot: "Compact Flash" Rechargeable battery attachment area: (instruction, attaching diagram) Battery cover lock/unlock switch area: (symbol: unlock icon, lock icon) Microphone hole: "MIC" Expansion bus connector area (appears when the cover is removed): Expansion Connector Other: faceplate

Key layout
Slide cover (moveable side)

LED specification

Name	Charging indicator	E-mail arrival indicator	Wireless LAN	Bluetooth
Number / color	1/orange	1/green	1/orange, green	1/blue
Specification	Charging: orange light on Completed: light out Charging error: quick blink	Newly arrived e-mail when receiving e-mail: light on The time set for calendar alarm has come: light on	Standby (The power is provided but no communication): orange light on While communication: green light on	Standby and communication: blue light on

Peripherals

Lithium polymer rechargeable battery **<EA-BL09>**
Specification

Item	Specification
Battery	Lithium polymer rechargeable battery
Nominal capacity	1500mAh
Nominal voltage	3.7V
External size	About 66.2 L ×75.3 W × 5.9mm H
Weight	About 60
Battery life	Charge and discharge 500 cycles
includes	PL card

AC adapter **<bundled EA-70, separately sold EA-70J>**
Appearance

Specification

Item	Specification	
Input	100V-240V 50/60Hz	
Output	5V 2A	
External size	About 47mm(L) ×72mm(W) × 27mm(H)	
Weight	About 120	

Cord length	About 1.8	
includes	AC cord specification for use in Japan PL card	To be bundled with an optional EA-70J

Cradle **<CE-ST10>**
Specification

Item		Specification	Remarks
Connection with PDA main unit		16-pin connector	
Power		AC adapter EA-70 connection DC-IN 5V	
Connection with PC	USB connection	USB B terminal	for USB cable connection
	RS-232C connection	16-pin connector	for serial cable <CE-170TS> connection

Expansion jacket support		Use (bundled) adapter
		  Attach adapter when inserting a PDA
		  unit without attaching expansion jacket	

Button		SYNC button provided	
External size		About 96mm(L) × 106mm(W) × 96.2mm(H)	
Weight		TBD	
includes		PL card USB cable 1.5	

Expansion jacket **<CE-JC2>**
Specification

Item		Specification
CF slot		1 slot
Protection of CF slot		CF slot protection card provided
Power	Battery	Replaceable 1500mAh lithium polymer rechargeable battery (The same battery as that used in PDA main unit)
	Recharging	Power is provided via 80-pin connecter from PDA main unit

I/O port		Serial port
		  for connection with exclusive serial cable <CE-170TS>
		(Simultaneous use with I/O port (16-pin) on PDA main unit is not
		  available)

Connection with PDA main unit		80-pin connector
Care for strap		A hole for strap is given
External size		About 79.8mm(L) × 158mm(W) × 20.2mm(H)
Weight		TBD
Includes		Lithium polymer rechargeable battery <EA-BL09> PL card

   Rechargeable battery attached to CF expansion jacket and the one in the main unit are charged at the same time when an AC adapter is plugged in DC-IN jack on the main unit.