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Transceiver NHE-4

Related Documentation

6E 0260294 Mechanics of NHE-4NX 6E 0260494 Mechanics of NHE-4NY 6E 0260292 Mechanics of NHE-4AX 6E 0260293 Mechanics of NHE-4BX

Introduction

The NHE-4 is a radio transceiver unit for the GSM network. It is GSM power class 4 transceiver providing 11 power levels at a maximum power of 2 W.

The transceiver consists of three modules: system module, user interface module and mechanics.

The plug-in SIM (Subscriber Identity Module) card reader is located inside the phone.

Functional Description

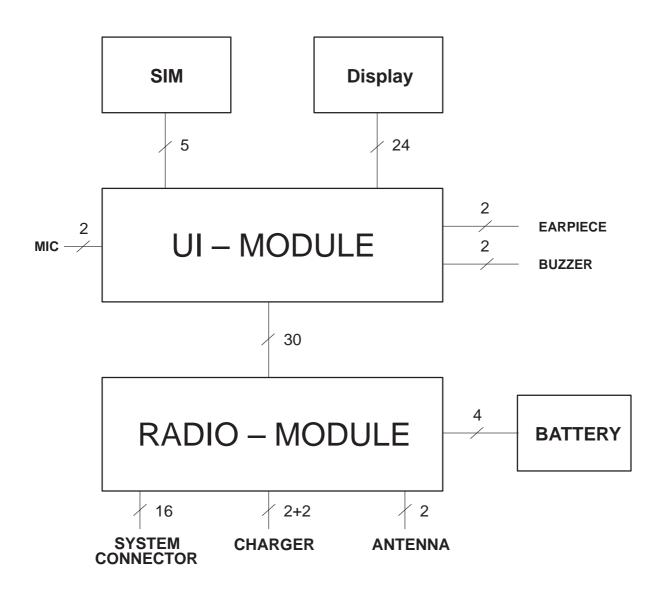
The transceiver electronics consist of radio module (system + RF blocks) and UIF module. UIF module is connected to radio module with a connector. System blocks and RF blocks are interconnected with PCB wirings. Transceiver can be connected to accessories with a bottom system connector, which includes charging and accessory control.

The system blocks provides MCU and DSP environments, logic control IC (ASIC), memories, audio processing and RF control hardware (RFI). On board power supply circuitry delivers operating voltage for both system and RF blocks.

The micro controller unit, Hitachi H8/536, communicates with DSP, memories and logic control IC (ASIC/D2CA) with 8 bit data bus.

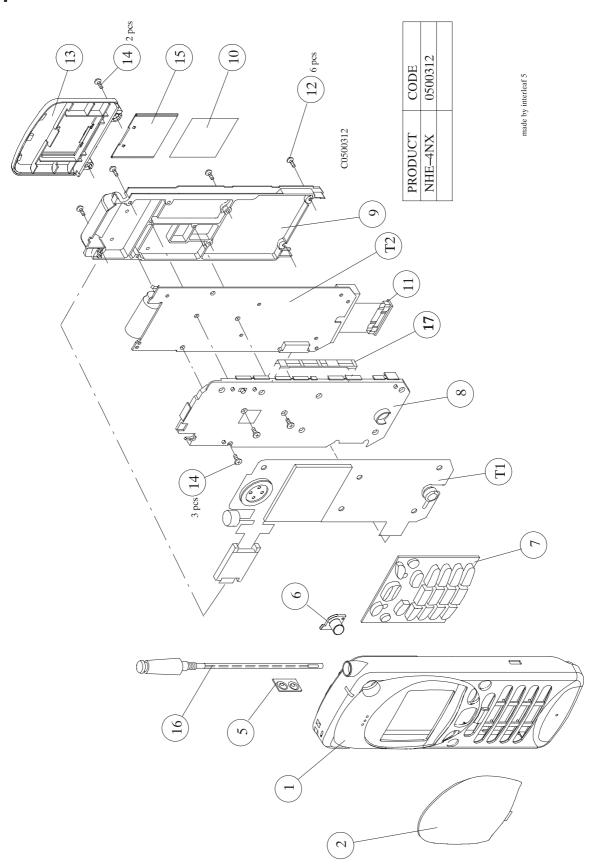
RF block is designed for a handportable phone; which operates in GSM system. Purpose of the RF block is to receive and demodulate radio frequency signal from the base station and to transmit a modulated RF signal to the base station.

Interconnection Diagram



Exploded View of NHE-4NX

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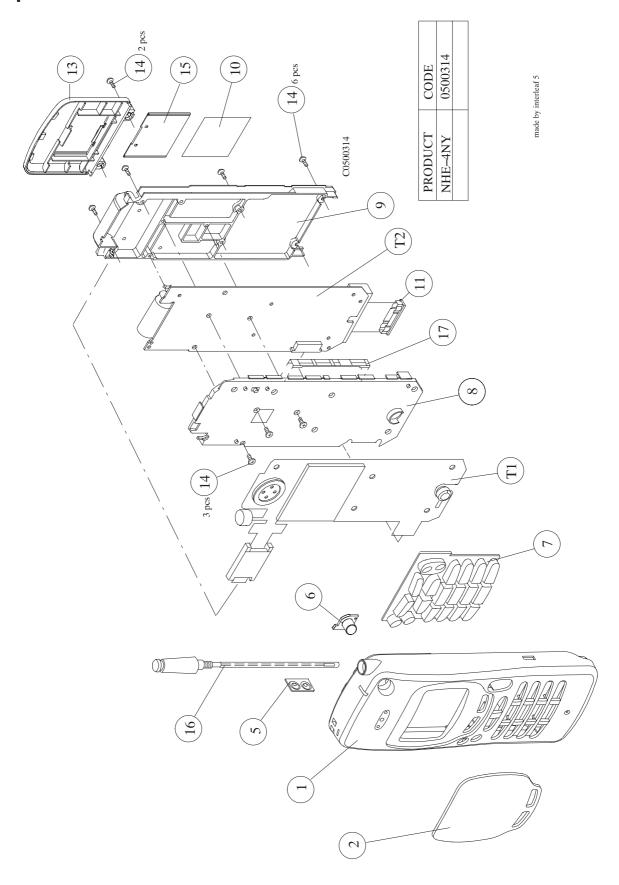




Assembly Parts of NHE-4NX

ITEM	Q'TY	CODE	DESCRIPTION	VALUE, TYPE
1		9450269	A cover	2D 24116
2		9457279	Window	3C 25908 (Nokia 2110)
2		9450710	Window	DMC00173-01 (2110 SIP)
2		9457159	Window	3C 24439 (Handyphone)
2		9457203	Window	4C 25034 (2110, D2)
2		9457283	Window	3C 25946 (Omnitel)
3		9480079	Window gasket	4D 23182
5		9790055	Sidekeymat	3D 22995
6		9790054	Power keymat	4C 23347
7		9790186	Keypad	DMC00166
8		9510298	A shield	1D 24197 B
9		9510299	B shield	1D 24198 B
10		9380115	Type label (print 4P25057)	
11		9457112	Connector cover	DMD01187
12	6	6290041	PT screw	1.8x8 FeZn TX6 h=0.9
13		9450434	B cover	1D 24212
14	5	6290060	PT screw	M2x5-BT ZNB TX6
15		9450230	SIM cover	3D 23018
16		0660096	Antenna JTI/GSM	872/960 MHz
17		9510286	Edge clip	4D 26101
T1		0200173	UIF module DU8	
T2		0200514	System module GR8	
		6291666	PT screw	1.8x5 FeZn TX6
		7310366	Tape polyethylene	I = 10 cm

Exploded View of NHE-4NY



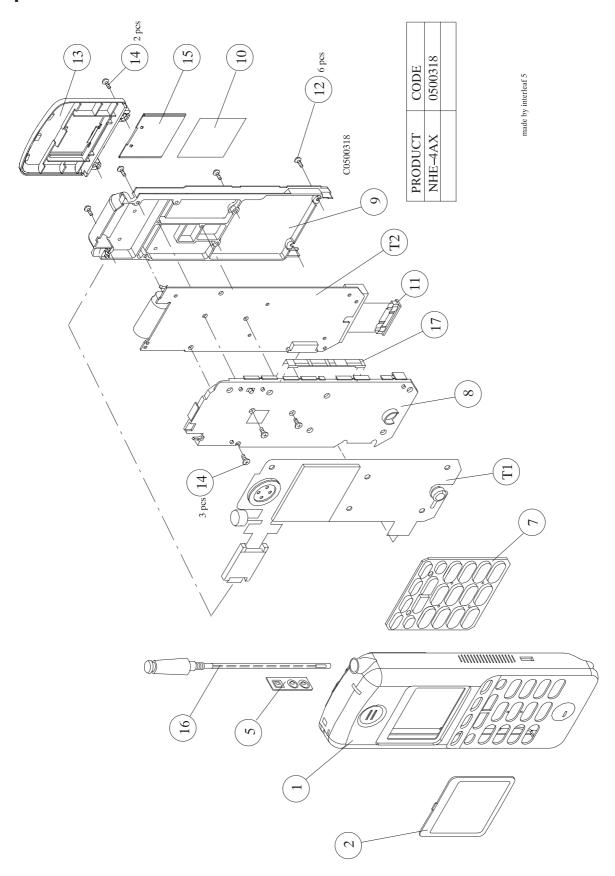


Assembly Parts of NHE-4NY

ITEM	Q'TY	CODE	DESCRIPTION	VALUE, TYPE
1		9457214	A cover	2C 25195 blue
1		9457215	A cover	2C 25195 black
2		9457176	Window	4C 24841 (Nokia 2118)blu
2		9450777	Window	4C 24841 (Nokia 2118)blk
5		9790055	Sidekeymat	3D 22995 `
6		9790124	Power keymat	4C 25142
7		9790194	Keypad	DMC00167
8		9510298	A shield	1D 24197 B
9		9510299	B shield	1D 24198 B
10		9380115	Type label (print 4P25058)	
11		9457112	Connector cover	DMD01187
12	6	6290041	PT screw	1.8x8 FeZn TX6 h=0.9
13		9450434	B cover	1D 24212
14	5	6290060	PT screw	M2x5-BT ZNB TORX6
15		9450230	SIM cover	3D 23018
16		0660096	Antenna JTI/GSM	872-960 MHz
17		9510286	Edge clip	4D 26101
T1		0200516	UIF module GU3E	
T2		0200514	System module GR8	
		6291666	PT screw	1.8x5 FeZn TX6
		7310366	Tape polyethylene	I = 10 cm

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Exploded View of NHE-4AX



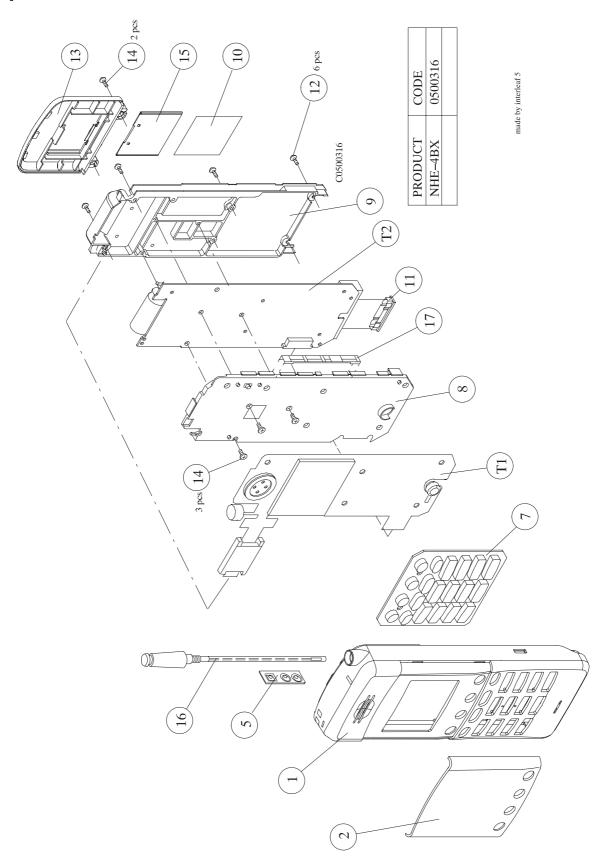


Assembly Parts of NHE-4AX

ITEM	Q'TY	CODE	DESCRIPTION	VALUE, TYPE
1		9450270	A cover	2C 24119
1		9457160	A cover	4C 22669 (Darwin)
2		9457080	Window	3C 23299 (Nokia 5000)
2		9457084	Window	3C 23419 (Mobira 5000)
2		9450750	Window	DMC00177-01 (Darwin)
5		9790047	Sidekeymat	4D 22780
7		9790080	Keypad	4C 23793
7		9790195	Keypad	DMC00168 (Nokia 5000)
8		9510298	A shield	1D 24197 B
9		9510299	B shield	1D 24198 B
10		9380115	Type label (print 4P25059)	
11		9457112	Connector cover	DMD01187
12	6	6290041	PT screw	1.8x8 FeZn TX6 h=0.9
13		9450434	B cover	1D 24212 (Nokia 5000)
13		9450231	B cover	1D 23017
14	5	6290060	PT screw	M2x5-BT ZNB TORX6
15		9450230	SIM cover	3D 23018
16		0660096	Antenna JTI/GSM	872/960 MHz
17		9510286	Edge clip	4D 26101
T1		0200174	UIF module DU9	
T2		0200514	System module GR8	
		6291666	PT screw	1.8x5 FeZn TX6
		7310366	Tape polyethylene	I = 10 cm



Exploded View of NHE-4BX





Assembly Parts of NHE-4BX

ITEM	Q'TY	CODE	DESCRIPTION	VALUE, TYPE
1 2 5 7 8 9 10		9450268 9457258 9790047 9790196 9510298 9510299 9380115	A cover Window Sidekeymat Keypad A shield B shield Type label (print 4P25060)	2C 24120 3C 25437 (Nokia 880) 4D 22780 DMC00169 1D 24197 B 1D 24198 B
11 12 13	6	9457112 6290041 9450434	Connector cover PT screw B cover	DMD01187 1.8x8 FeZn TX6 h=0.9 1D 24212
14 15 16 17 T1 T2	5	6290060 9450230 0660096 9510286 0200174 0200514 6291666 7310366	PT screw SIM cover Antenna JTI/GSM Edge clip UIF module DU9 System module GR8 PT screw Tape polyethylene	M2x5-BT ZNB TORX6 3D 23018 872/960 MHz 4D 26101 1.8x5 FeZn TX6 I = 10 cm