

Antenna Report

Project Name :	ROSE130	Date:	12/08/2008
Project Manager:	Vincent Jou	Author	Johnson Huang

Countersign:

Johnson Huang _____

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

CONTENTS

Embedded GSM/UMTS Antenna specification	P.3
Embedded GPS/AGPS Antenna specification	P.6
Embedded BT/WIFI Antenna specification	P.9

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

Embedded GSM/UMTS Antenna

1. Overview

The document is the specification of the embedded Quad-band GSM and Single-band UMTS antenna for phone applications. Quad-band GSM includes GSM850, GSM900, DCS1800, and PCS1900. UMTS includes Band II and Band V.

Denotations

dBi: Decibel relative isotropic antenna

VSWR: Voltage Standing Wave Ratio

Tx: Transmit frequency

Rx: Receive frequency

GSM: Global Service for Mobile communication

PCS: Personal Communication System

DCS: Digital Communication System

UMTS: Universal Mobile Telecommunications System

Peak Gain: The peak value of the antenna gain

Average Gain: The average value of the antenna gain

Antenna Type

PIFA type

Fixed internal antenna

1.3 Antenna Brand

Design by HTC

Manufacture by Amphenol

1.4 Antenna Model name

ROSE130: 37H00089-00M

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

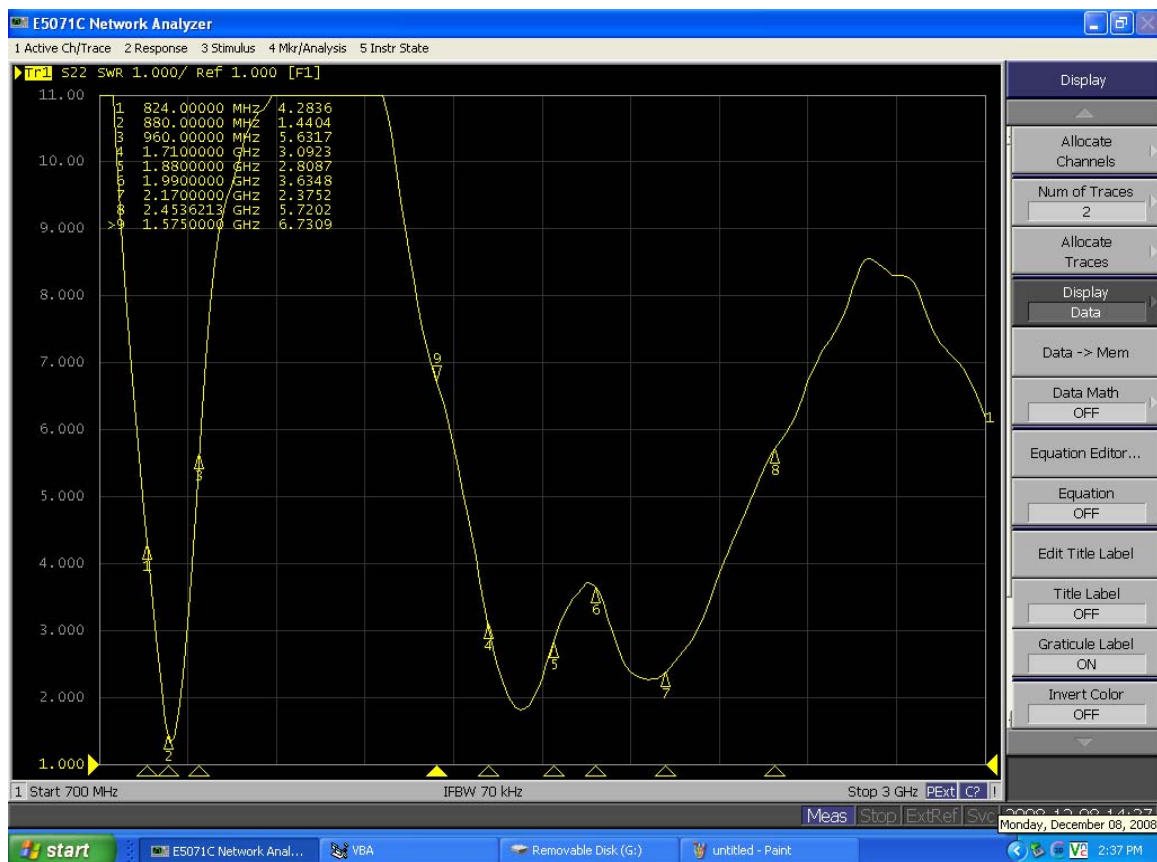
2. Antenna specification

Frequency Allocation

824MHz~960MHz

1710MHz~1990MHz

VSWR



2.2 3D Antenna Gain

Frequency (MHz)	824	894	960	1710	1850	1990
Peak Gain (dBi)	-3	-2.5	-4	0.5	1.5	1

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

3. Antenna Materials

The antenna can not have the materials of plumbum (Pb), halogen and mercury (Hg).

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

Embedded GPS/AGPS Antenna

1. Overview

The document is the specification of the embedded GPS/AGPS antenna for phone applications.

1.1 Denotations

dBi: Decibel relative isotropic antenna

VSWR: Voltage Standing Wave Ratio

Tx: Transmit frequency

Rx: Receive frequency

GPS: Global Positioning System

AGPS: Assisted Global Positioning System

Peak Gain: The peak value of the antenna gain

Average Gain: The average value of the antenna gain

1.2 Antenna Type

PIFA type

Fixed internal antenna

1.3 Antenna Brand

Design by HTC

Manufacture by Amphenol

1.4 Antenna Model name

ROSE130: 37H00052-00M

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

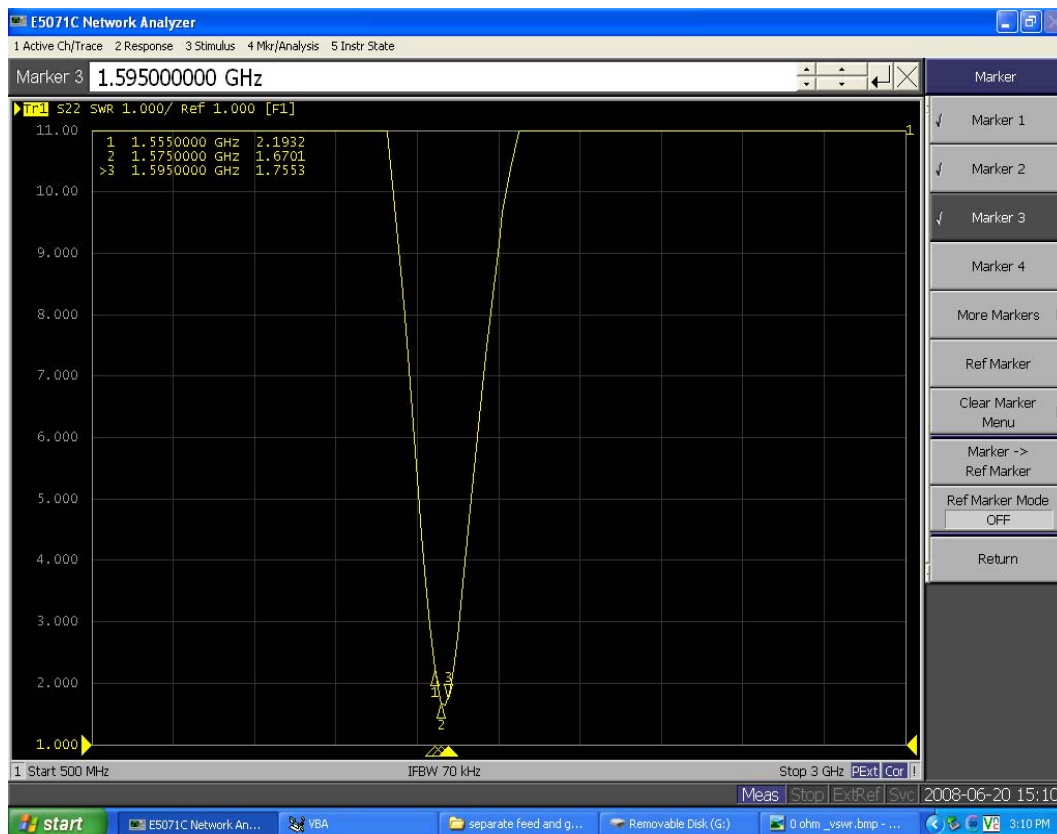
HTC CONFIDENTIAL

2 Antenna specification

2.1 Frequency Allocation

1575MHz~1576MHz

2.2 VSWR



2.2 3D Antenna Gain

Frequency (MHz)	1550	1575	1600
Peak Gain (dBi)	-3.9	-3.8	-4.4

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

6 Antenna Materials

The antenna can not have the materials of plumbum (Pb), halogen and mercury (Hg).

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

Embedded BT/WIFI Antenna

1. Overview

The document is the specification of the embedded BT/WIFI antenna for phone applications.

1.1 Denotations

dBi: Decibel relative isotropic antenna

VSWR: Voltage Standing Wave Ratio

Tx: Transmit frequency

Rx: Receive frequency

BT: Bluetooth is an industrial specification for wireless personal area networks (PANs).

WIFI: Wi-Fi (or Wireless Fidelity) is a brand originally licensed by the Wi-Fi Alliance to describe the embedded technology of wireless local area networks (WLAN) based on the IEEE 802.11 specifications.

Peak Gain: The peak value of the antenna gain

Average Gain: The average value of the antenna gain

1.2 Antenna Type

PIFA type

Fixed internal antenna

1.3 Antenna Brand

Design by HTC

Manufacture by Amphenol

1.4 Antenna Model name

ROSE130: 37H00052-00M

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

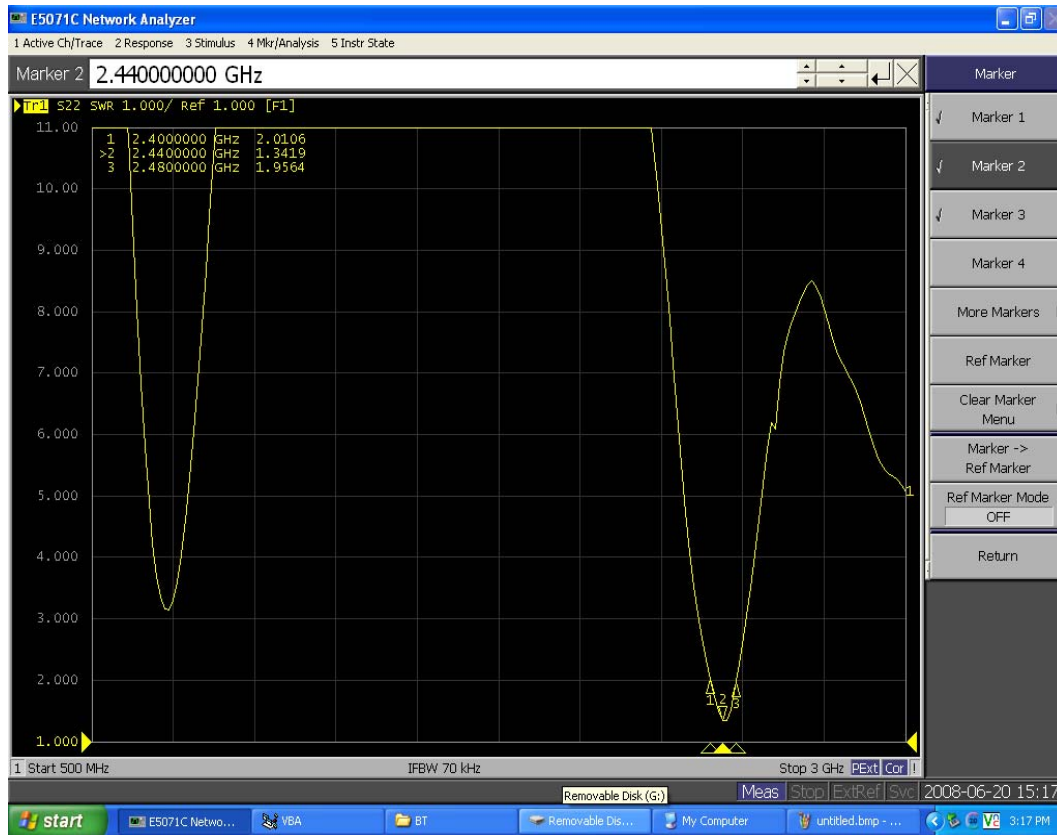
HTC CONFIDENTIAL

2 Antenna specification

2.1 Frequency Allocation

2402MHz~2480MHz

2.2 VSWR



2.2 3D Antenna Gain

Frequency (MHz)	2400	2450	2500
Peak Gain (dBi)	-0.8	-0.2	-1

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL

6 Antenna Materials

The antenna can not have the materials of plumbum (Pb), halogen and mercury (Hg).

PROPRIETARY NOTE

THIS DOCUMENT CONTAINS INFORMATION CONFIDENTIAL AND PROPRIETARY TO HIGH TECH COMPUTER CORP. AND SHALL NOT BE REPRODUCED OR TRANSFERRED TO OTHER DOCUMENTS OR DISCLOSED TO OTHERS OR USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT WAS OBTAINED WITHOUT THE EXPRESSED WRITTEN CONSENT OF HIGH TECH COMPUTER CORP.

HTC CONFIDENTIAL