

Aspen

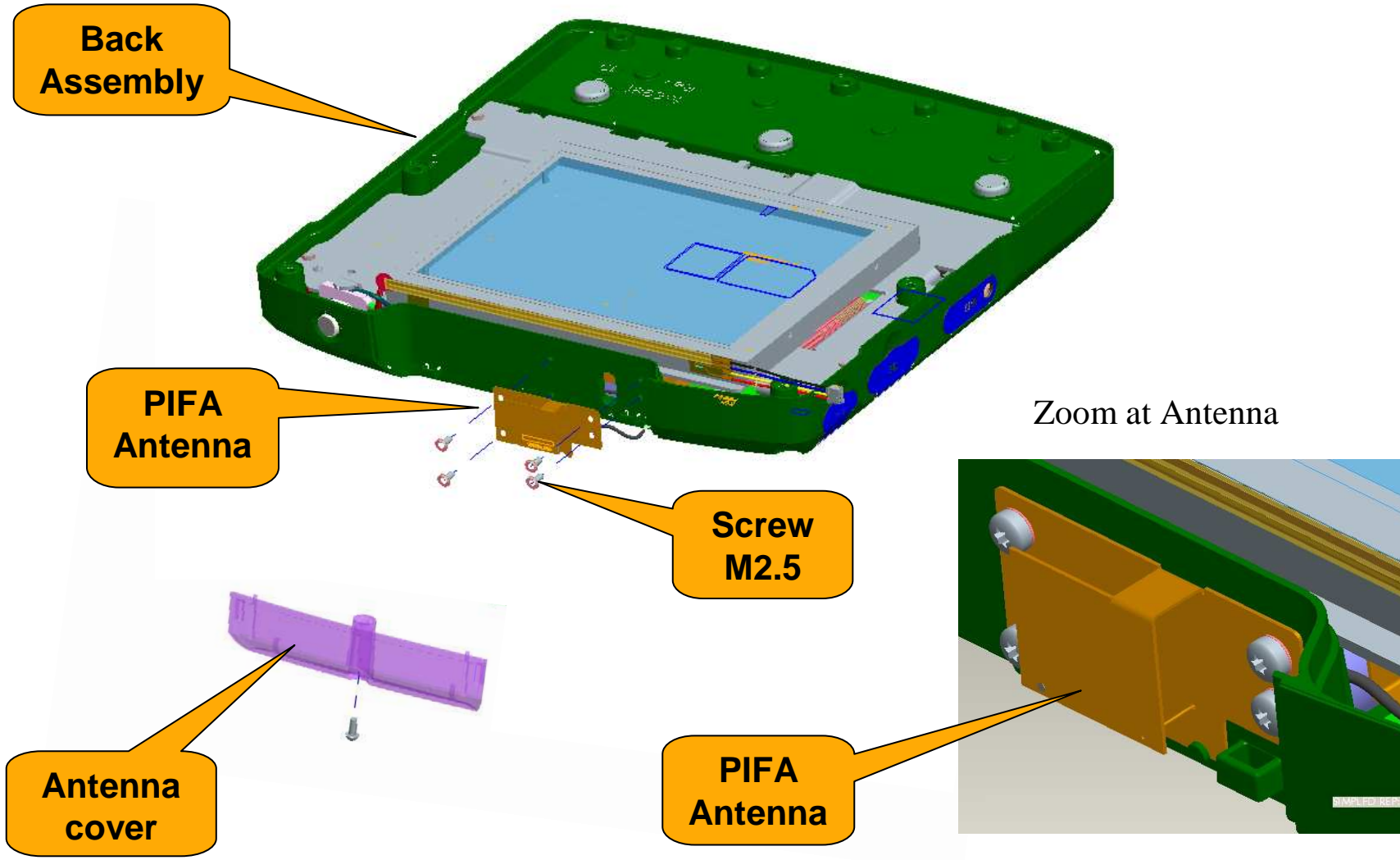
BT Antenna Specifications

Description



The antenna designed for VC60xx ASPEN Project.
The PIFA antenna type is attached with 4 screws to the special location in the top chassis.
The antenna are made of stamped metal, which a custom cable with a U.FL type connector.

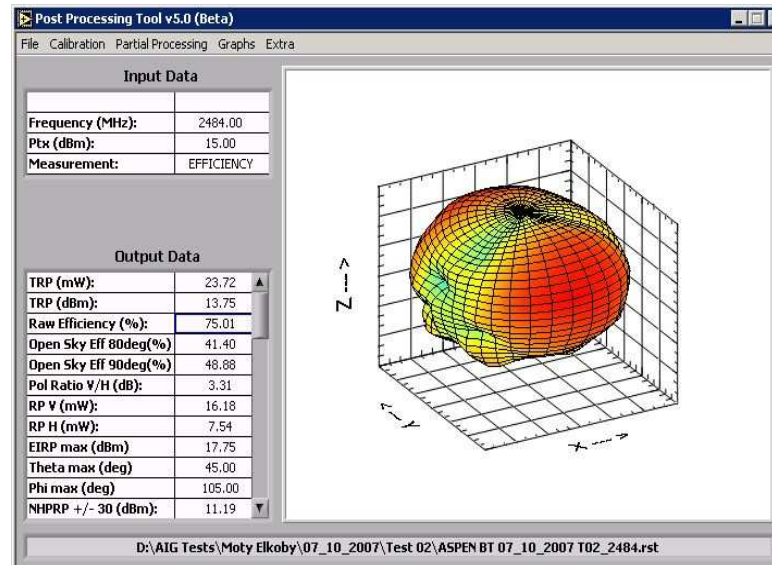
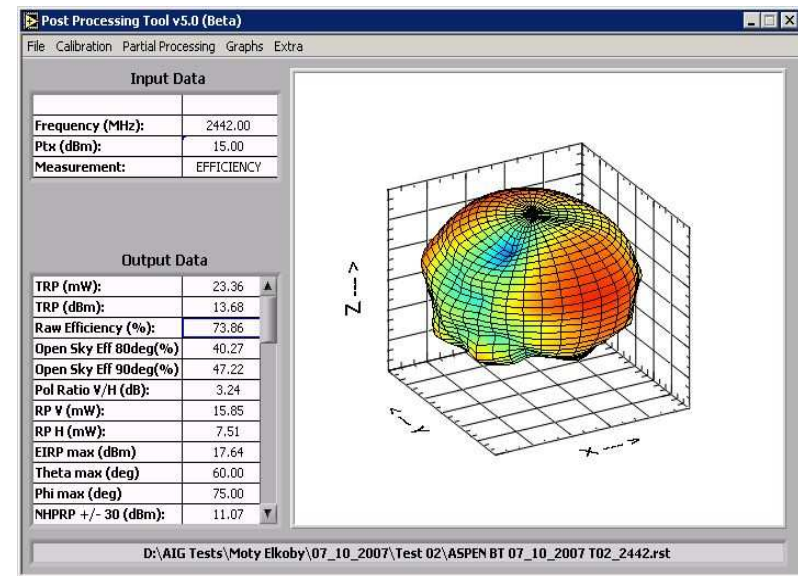
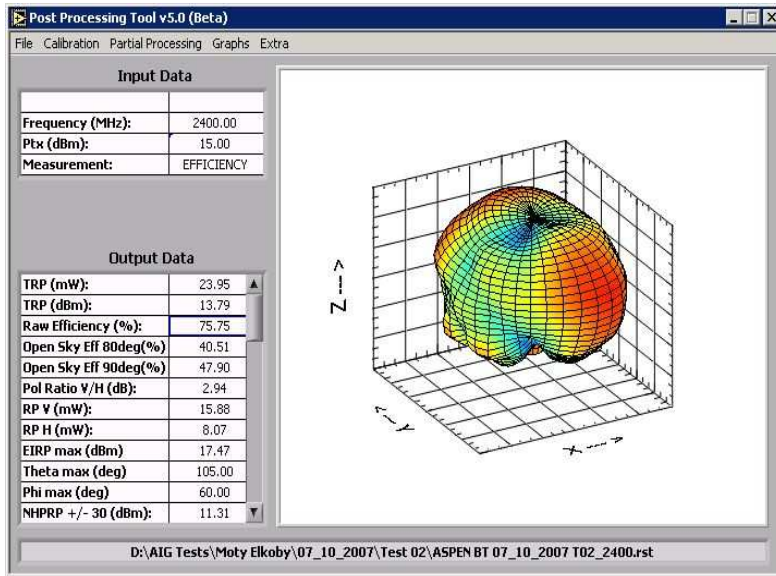
Internal BT Antenna Assembly *intelligence* *everywhere*[™]



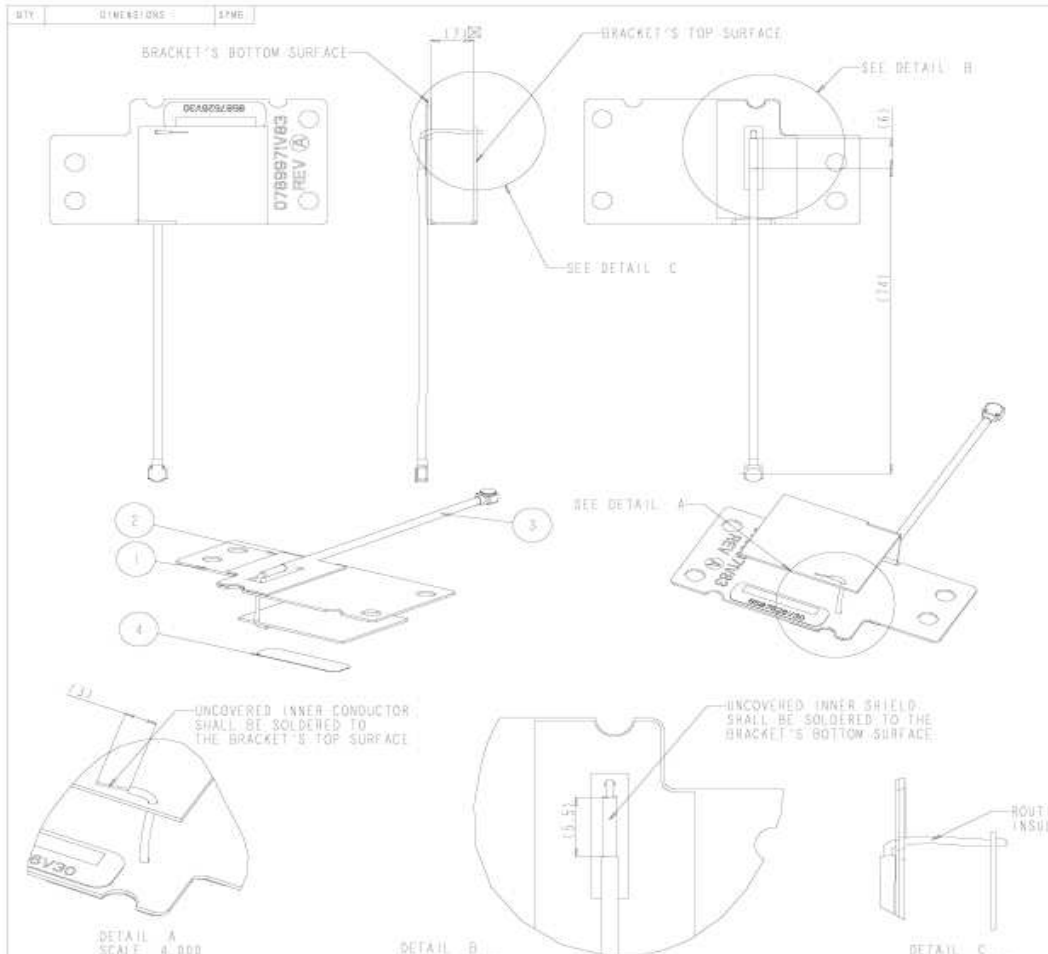
ASPEN BT Antenna Electrical Specifications

Internal Antenna	
Radio Type	BT
Radio Band	ISM Band
Frequency (MHz)	2400-2480
Peak Gain max. (dBi)	3
VSWR Max.	1.5:1
Polarization	LV & LH
Radiation Pattern	Omni Directional
Impedance (ohm)	50
Hirose Coax Cable	U.FL

RADIATION PATTERN



BT Antenna Assembly



BRACKET'S BOTTOM SURFACE

BRACKET'S TOP SURFACE

SEE DETAIL B

SEE DETAIL C

SEE DETAIL A

UNCOVERED INNER CONDUCTOR SHALL BE SOLDERED TO THE BRACKET'S TOP SURFACE

UNCOVERED INNER SHIELD SHALL BE SOLDERED TO THE BRACKET'S BOTTOM SURFACE

ROUTING OF UNCOVERED INSULATOR

DETAIL A SCALE: 4.000

DETAIL B SCALE: 4.000

DETAIL C SCALE: 4.000

1. DESCRIPTION AND APPLICATION: ANTENNA ASSEMBLY FOR USE IN COMMUNICATION EQUIPMENT

2. APPLICABLE DOCUMENTS:

- 12M0222AAE MOTOROLA QUALIFICATION PROGRAM
- 12M0222AAE MOTOROLA VENDOR MATERIAL QUALITY CONTROL
- 1312501A MOTOROLA PACKAGING RULES FOR VENDORS
- 12S2368 MOTOROLA MARKING STANDARDS
- AMEL P14 0M 1988 DIMENSIONING AND TOLERANCING FOR CHOC DRUGS
- 24-50 07 MCIL 1st ARTICLE APPROVAL PROCEDURE ASTM D-1338
- 12M0451010 MOTOROLA RECYCLE MARK
- 1202281818 REV. X; APP. C; SET. 2 MOTOROLA CONTROLLED AND REPORTABLE MATERIALS DISCLOSURE
- 12M0418A2E MOTOROLA REGISTERED SURFACE RELIABILITY REQUIREMENT

3. REQUIREMENTS:

3.1. GENERAL:

- 1.1 PARTS SHALL BE CLEAN AND FREE OF ALL FOREIGN MATTER
- 1.2 DIMENSIONING AND TOLERANCING PER ANSI Y14.5
- 1.3 DIMENSIONS MARKED (X) ARE CRITICAL CHARACTERISTICS AND REQUIRE P.P.C. REPORT PER MOTOROLA SPEC 12M0222AAE
- 1.4 PACKAGING PER DRAWING PER 1312501A
- 1.5 VENDOR WILL PROVIDE FOR (X) ARTICLES INSPECTION:
 - 1.5.1 IDENTIFIED ITEMS
 - 1.5.2 MATERIALS C/O
 - 1.5.3 FULL DIMENSION INSPECTION REPORT (NO. 02CM) (2) AND CMA CALCULATION FOR (2) DIMENSIONS

3.2. MATERIALS:

- 3.2.1 BRACKET MATERIAL (ITEM 3) - NICKEL SILVER LABEL MATERIAL (ITEM 4) - WHITE POLYPROPYLENE (WPP) ADHESIVE MATERIAL (ITEM 5) - 120000
- 3.2.2 SAMPLE PARTS SHALL BE SUBMITTED TO MOTOROLA FOR APPROVAL BEFORE PROCEEDING WITH PRODUCTION RUN
- 3.2.3 MECHANICAL UNLESS OTHERWISE SPECIFIED:
 - 3.2.3.1 MARKING PER 12S2368

4. VENDOR QUALITY ASSURANCE PROVISIONS PER 12M0222AAE AND 12M04222ABE

5. EXCEPTIONS: NO CHANGE SHALL BE ALLOWED ON PRODUCTION MATERIAL UNLESS IT DOES NOT AFFECT REQUIREMENTS SPECIFIED WITHOUT PRIOR EXPLICIT WRITTEN APPROVAL BY MOTOROLA PHYSICAL DESIGN AND PACKAGING DEPARTMENTS.

6. ANTENNA MUST BE ASSEMBLED ON THE TEST FIXTURE AND THE LIMITS ARE:

S11 BY ANTENNA		
FREQ. (MHz)	MAX	MIN
2.410	-2.2	-2.2
2.520	-2.5	-2.5


7. ASSEMBLY:

- 7.1 CLEAN THE TOP SURFACE OF THE BRACKET (ITEM 3) WITH IPA
- 7.2 CLEAN BOTTOM SURFACE OF THE BRACKET (ITEM 3) WITH IPA
- 7.3 ROUTE THE INNER INSULATOR OF THE COAX CABLE (ITEM 2) THROUGH THE HOLE IN THE TOP AND BOTTOM SURFACES OF THE BRACKET (ITEM 3) AS SHOWN IN DETAIL C
- 7.4 SOLDER THE INNER CONDUCTOR OF THE COAX CABLE (ITEM 2) TO TOP SURFACE OF THE BRACKET (ITEM 3) AS SHOWN IN DETAIL A
- 7.5 SOLDER THE INNER SHIELD OF THE COAX CABLE (ITEM 2) TO BOTTOM SURFACE OF THE BRACKET (ITEM 3) AS SHOWN IN DETAIL B
- 7.6 ADHERE THE ADHESIVE (ITEM 5) TO THE BOTTOM SURFACE OF THE BRACKET (ITEM 3) AS SHOWN ON VIEW
- 7.7 CLEAN AREA OF SOLDERING WITH IPA
- 7.8 ADHERE LABEL (ITEM 4) AS SHOWN ON THE VIEW
- 7.9 REMOVE FLUX RESIDUE FROM BRACKET

REV	DESCRIPTION	REVCD
T1	RELEASED FOR QUOTATION EDAN S	11 NOV 2007
T2	TABLE UPDATE CHANGE WIRE REV TO W EDAN S	22 NOV 2007
T3	FLIP CONN ORIENTATION EDAN S	19 DEC 2007
T4	ADD EPOXY TO WIRE'S END EDAN S	13 FEB 2008
T5	CHANGE ASSEMBLY INSTRUCTIONS REMOVE EPOXY EDAN S	9 MAR 2008
T6	CHANGE INSTRUCTION ADD E-BOX DIMENSION ADD SET DIMENSIONS ADD PACKAGE REQUIREMENTS EDAN S	18 MAY 2008
A	FIRST RELEASE FCN C281108 EDAN S	18 MAY 2008
A1	FIX BOX TABLE FIX WSPR TABLE EDAN S	2 JUN 2008

No.	MOTOROLA P/N	QTY	DESCRIPTION	NOTES
2	5471671Y24	1	LABEL, BLUETOOTH ANTENNA	
3	3002823CR4	1	CABLE, B.F.L	
2	1188096U94	1	ADHESIVE, BLUETOOTH ANTENNA	
1	0789911V83	1	BRACKET, BLUETOOTH ANTENNA	

B.O.M. TABLE

MOTOROLA CONFIDENTIAL RESTRICTED		DESCRIPTION		CAT. NO.	
COPYRIGHT MOTOROLA	TOLERANCES:	PLATING:	MATERIAL:	 MOTOROLA BLUETOOTH ANTENNA ASSEMBLY	
GENERAL:	ANGLES:	FINISH:	SEE TABLE		
GRAPHICS:	THREADS:			DESIGNED: COAR S	11-Sep-07
				APPROVED: AETD S	11-Sep-07
				SCALE: 2:0	SHEET: 1 OF 1
				85C87526V30 AI	