# APPLICATION FOR CERTIFICATION On Behalf of

# SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT Co., Ltd

# Mini PC

Model Number: Giada Slim-N20

FCC ID: YIKN20

Prepared for: SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT

Co., Ltd

2/F, Block A, Tsinghua Information Harbor, North Section, Shenzhen Hi-tech Park, Nanshan District, Shenzhen, China

P. R

Prepared By: Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen, Guangdong, China

Tel: (0755) 26639496

Report Number : ACS-F10157

Date of Test : Jun.12~18, 2010

Date of Report : Jul.23, 2010

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# TEST REPORT CERTIFICATION

Applicant : SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT Co., Ltd

EUT Description : Mini PC FCC ID : YIKN20

(A)MODEL NO. : Giada Slim-N20

(B)SERIAL NO. : N/A

(C)POWER SUPPLY : DC 19V Adapter Input AC 120V/60Hz

(D)TEST VOLTAGE

: DC 19V Adapter Input AC 120V/60Hz

Test Procedure Used:

FCC Rules and Regulations Part 15 Subpart B Class B 2008, ANSI C63.4-2009

The device described above is tested by Audix Technology (Shenzhen) Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart B limits for radiated and conducted emissions.

The test results are contained in this test report and Audix Technology (Shenzhen) Co., Ltd. is assumed full responsibility for the accuracy and completeness of tests. Also, this report shows that EUT is technically compliant with FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Audix Technology (Shenzhen) Co., Ltd.

Date of Test.	Jun.12~18, 2010
Prepared by :	Annie Wil
	Annie Wu / Senior Assistant
Reviewer :	Journs Kn
	Jamy Yu / Supervisor
Approved & Authorized Signer	Audix Technology (Shenzhen) Co., Ltd.  EMC 部門報告専用章  Stamp only for EMC Dept. Report  Signature:

Ken Lu / Manager

# 1. SUMMARY OF STANDARDS AND RESULTS

# 1.1.Description of Standards and Results

The EUT have been tested according to the applicable standards as referenced below.

EMISSION					
Description of Test Item	Standard	Limits	Results		
Power Line Conducted Emission Test	FCC Part 15: 2008 ANSI C63.4: 2009	Class B	PASS		
Radiated Emission Test	FCC Part 15: 2008 ANSI C63.4: 2009	Class B	PASS		

# 2. GENERAL INFORMATION

2.1.Description of Device (EUT)

Product name : Mini PC (Note)

Model Number : Giada Slim-N20

FCC ID : YIKN20

Applicant : SHENZHEN JIEHE TECHNOLOGY DEVELOPMENT Co.,

Ltd

2/F, Block A, Tsinghua Information Harbor, North Section, Shenzhen Hi-tech Park, Nanshan District, Shenzhen, China

P.R

Manufacturer : CHEER ASCENT Electronics Co., Ltd

Block 1, Fuhai Industrial Park, Fuyong town, Baoan District,

Shenzhen, China P.R

Date of Test : Jun.12~18, 2010

Date of Receipt : Jun.07, 2010

Sample Type : Series production

Note: This EUT is Class B Mini PC, for test purpose, a typical Class B personal

computer was configured by applicant with this EUT.

Note: This device contains a wireless module, and this wireless module have been certificated as module approval.

# 2.2. Test configuration with EUT

Category	Vendor and Model		
Demansion	160*175*23mm		
CPU	Intel® Atom® Processor D510		
Chipset	Intel® NM10		
GPU	NVIDIA® ION® (GT218)		
RAM(optional)	2G DDR2		
<b>HDD</b> (optional)	320G		
LAN	Gigabit		
WIFI(optional)	Wireless LAN 802.11b/g/n+ Bluetooth		
USB Port	X2		
Display output	1*VGA, 1*HDMI		
Esata	X1		
Card reader	4 in 1		
Audio output	L/R Channel, SPDIF-out		

A special PC test software "BurnInTest.exe" was used to exercise all functions of PC (full efficiency running of CPU, read and write data from Hard disk, output "H" character, all output and input port of EUT were also exercised by typical accessories)

# 2.1.Tested Supporting System Details

# 2.1.1. MONITOR #1

EMC CODE : ACS-EMC-LM07R

M/N : 3008WFPt

S/N : CN-0RW915-71618-846-397L

Manufacturer : DELL

Data Cable (VGA) : Shielded, Detachabled, 2.0m
Power Cord : Unshielded, Detachabled, 1.8m

FCC ID : By DoC

### 2.1.2. MONITOR #2

EMC CODE : ACS-EMC-LM04R

M/N : 1907FPt

S/N : CN-009759-71618-6AP-ACPP

Manufacturer : DELL

Data Cable ( HDMI ) : Shielded, Detachabled, 2.0m Power Cord : Unshielded, Detachabled, 1.8m

FCC ID : By DoC BSMI ID : R3A002

# 2.1.3. USB Keyboard

EMC CODE : ACS-EMC-K01R

M/N : SK-8115

S/N : CN-ODJ313-71616-711-0J73

Manufacturer : DELL

Data Cable : Shielded, Undetachabled, 2.0m

FCC ID : By DoC BSMI ID : T3A002

# 2.1.4. USB MOUSE

EMC CODE : ACS-EMC-M01R

M/N : M056UO S/N : 512022645

Manufacturer : Dell

Data Cable : Shielded, Undetachabled, 1.8m

FCC ID : By DoC BSMI ID : R41108

### 2.1.5. MICROPHONE

EMC CODE : ACS-EMC-MIC01

M/N : SM-300 Manufacturer : SONCN

Data Cable : Shielded, Undetachabled, 1.7m

### 2.1.6. HEADPHONE

EMC CODE : ACS-EMC-EP01

M/N : OV880V
Manufacturer : OVANN

Data Cable : Shielded, Undetachabled, 1.2m

### 2.1.7. E-SATA

EMC CODE : ACS-EMC-HDD11(eSATA)

M/N : 9NL7A6-510 S/N : 9QM3Q574

Manufacturer : Seagate

Data Cable : Unshielded, Detachabled, 1.5\*2m, 0.5m

FCC ID : By DoC BSMI ID : D33027

# 2.1.8. Power Amplifier

EMC CODE : ACS-EMC-AMP01

M/N : AV-805 Manufacturer : SANGU

Cable : Unshielded, Undetachable 1.2m

# [HUB SYSTEM & PARTNER PC SYSTEM]

### - Used for At Shielded Room and Semi-Anechoic Chamber

# 2.1.9. HUB (10/100/1000 FAST ETHERNET SWITCH)

ACS-EMC-DL01 EMC CODE

M/NDGS-1008D

Manufacturer D-Link

S/N B2C6468500622

Data Cable Shielded, Detachabled, 1.8m Adaptor Unshielded, detachabled, 1.0m :

(RL48-07V51000)

FCC ID By DoC

### 2.1.10.EXCHANGE

EMC CODE EMC2.017B

M/NCD8000

S/N X4Y740Y3T388N9X

Manufacturer CHAN DE

Data Cable Unshielded, Undetachabled, 10m

### 2.1.11.PC

M/N **DELL 490** S/N 2Q5932X **DELL** 

Manufacturer :

Power Cord Unshielded, Detachabled, 1.8m

### 2.1.12.17"COLOR MONITOR

M/NE772F

S/N CN-02W486-64180-3CE-00L9 :

Manufacturer **DELL** 

Power Cord Unshielded, Detachabled, 1.8m VGA Cable Shielded, Detachabled, 1.8m

### **2.1.13.KEYBOARD**

M/NSK-8115

S/N CN-ODJ313-71616-711-04WJ :

Manufacturer **DELL** 

Data Cable Unshielded, Undetachabled, 2.0 m

# 2.1.14.MOUSE

M/N : M056UO S/N : 512024282

Manufacturer : DELL

Data Cable : Unshielded, Undetachabled, 1.8m

# 2.2.Test Facility

Site Description

Name of Firm : Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Rd., 52 Block, Shenzhen Science & Industrial Park, Nantou, Shenzhen,

Guangdong, China

3m Anechoic Chamber : Mar. 31, 2009 File on Federal Communication

Commission

Registration Number: 90454

3m & 10m Anechoic Chamber : Dec. 30, 2009 File on Federal Communication

Commission

Registration Number: 794232

EMC Lab. : Accredited by DATech, German

Registration Number: DAT-P-091/99-01

Feb. 02, 2009

Accredited by NVLAP, USA NVLAP Code: 200372-0

Apr.01, 2010

# 2.3. Test Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Uncertainty for Conduction emission test in No. 2 Conduction	3.22dB
	3.46dB (30~200MHz, Polarize: H)
Uncertainty for Radiation Emission test	3.72dB (30~200MHz, Polarize: V)
in 10m chamber (Distance: 10m)	3.74dB (200M~1GHz, Polarize: H)
	3.72dB (200M~1GHz, Polarize: V)
Uncertainty for Radiation Emission test in	3.12 dB (Distance: 3m Polarize: V)
10m chamber (1GHz-18GHz)	3.74 dB (Distance: 3m Polarize: H)
Uncertainty for SVSWR in 10m Chamber	2.42 dB (Distance: 3m Polarize: V)
Checitanity for 5 v5 wk in four chamber	2.44 dB (Distance: 3m Polarize: H)
Uncertainty for test site temperature and	0.3°C
humidity	2%

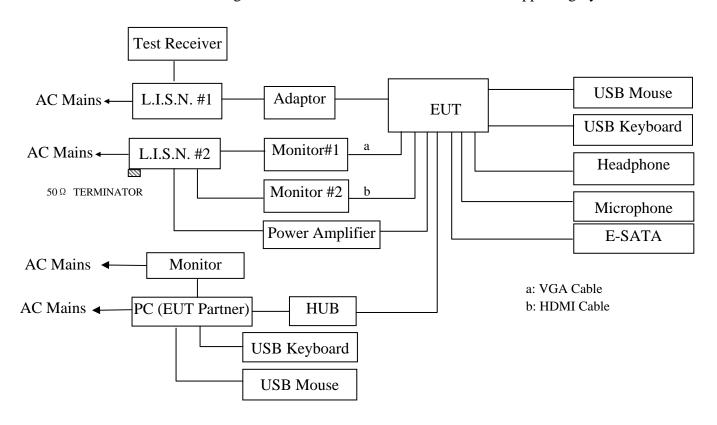
# 3. POWER LINE CONDUCTED EMISSION TEST

# 3.1. Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Test Receiver	Rohde & Schwarz	ESCI	100843	Mar.30, 10	1 Year
2	L.I.S.N.#1	Rohde & Schwarz	ENV4200	100041	May.08, 10	1 Year
3	L.I.S.N.#2	Kyoritsu	KNW-407	8-1628-5	May.08, 10	1 Year
4	Terminator	Hubersuhner	50Ω	No. 2	May.08, 10	1 Year
5	RF Cable	Fujikura	3D-2W	LISN Cable 2#	May.08, 10	1 Year
6	Coaxial Switch	Anritsu	MP59B	6200298346	May.08, 10	1 Year
7	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100340	May.08, 10	1 Year

# 3.2. Block Diagram of Test Setup

# 3.2.1. Block diagram of connection between the EUT and Supporting System



(EUT: Mini PC)

# 3.3. Power Line Conducted Emission Test Limits

	Maximum RF Line Voltage			
Frequency	Quasi-Peak Level	Average Level		
	$dB(\mu V)$	$dB(\mu V)$		
150kHz ~ 500kHz	66 ~ 56*	56 ~ 46*		
500kHz ~ 5MHz	56	46		
5MHz ~ 30MHz	60	50		

Notes: 1. \* Decreasing linearly with logarithm of frequency.

<sup>2.</sup> The lower limit shall apply at the transition frequencies.

# 3.4. Configuration of EUT on Test

The following equipment are installed on Power Line Conducted Emission Test to meet the commission requirement and operating regulations in a manner which tends to maximize its emission characteristics in a normal application.

3.4.1. Mini PC (EUT)

Model Number : Giada Slim-N20

Serial Number : N/A

3.4.2. Support Equipment : As Tested Supporting System Detail, in Section 2.2

# 3.5. Operating Condition of EUT

3.5.1. Setup the EUT and simulator as shown as Section 3.2.

3.5.2. Turned on the power of all equipment.

3.5.3. PC run test software "BurnInTest.exe" to exercise all functions of EUT

### 3.6. Test Procedure

The EUT was placed on a non-metallic table, 80cm above the ground plane. The EUT Power connected to the power mains through a line impedance stabilization network (L.I.S.N. 1#). This provides a 50 ohm coupling impedance for the EUT (Please refer the block diagram of the test setup and photographs). The other peripheral devices power cord connected to the power mains through a line impedance stabilization network (L.I.S.N.#2). Both sides of AC line are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.4-2009 on Conducted Emission Test.

The bandwidth of test receiver (R & S ESCI) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

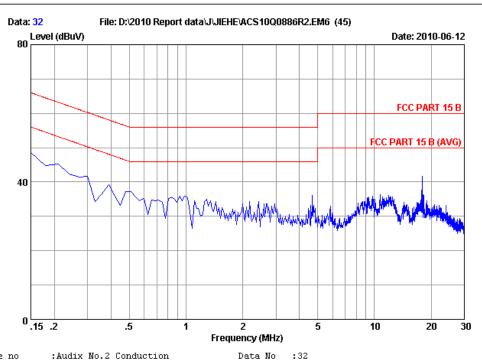
The test result are reported on Section 3.7.,

### 3.7. Power Line Conducted Emission Test Results

**PASS.** (All emissions not reported below are too low against the prescribed limits.)



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LISN phase:LINE

Engineer :Restar

Site no :Audix No.2 Conduction
Dis./Ant. :\*\* 2010 ENV4200
Limit :FCC PART 15 B

Env./Ins. :29.5\*C/55%

EUT :Mini PC M/N:Giada Slim-N20

Power Rating :AC 120V/60Hz

Test Mode :Running Burnin Test V5.3 VGA+HDMI:640\*480@60Hz

Data: 31 File: D:2010 Report data J.J.JIEHE\ACS10Q0886R2.EM6 (45)

Bote: 2010-06-12

FCC PART 15 B (AVG)

15 .2 .5 1 2 5 10 20 30

Frequency (MHz)

Data No

:31

LISN phase:NEUTRAL

Engineer :Restar

Site no :Audix No.2 Conduction
Dis./Ant. :\*\* 2010 ENV4200
Limit :FCC PART 15 B

Env./Ins. :29.5\*C/55% EUT :Mini PC M/N:Giada Slim-N20

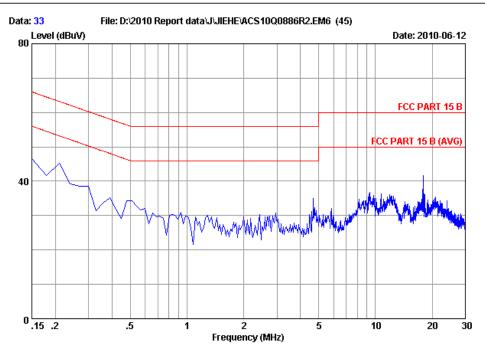
Power Rating :AC 120V/60Hz
Test Mode :Running Burni

Test Mode :Running Burnin Test V5.3 VGA+HDMI:640\*480@60Hz



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Fax:+86-755-26632877 Postcode:518057



Data No

:33

LISM phase:LIME

Engineer : Restar

Site no :Audix No.2 Conduction
Dis./Ant. :\*\* 2010 ENV4200
Limit :FCC PART 15 B
Env./Ins. :29.5\*C/55%

:Mini PC M/N:Giada Slim-N20

Power Rating :AC 120V/60Hz

EIIT

Test Mode :Running Burnin Test V5.3 VGA+HDMI:1280\*1024@75Hz

Data: 34 File: D: 2010 Report data \J\JIEHE\ACS10Q0886R2.EM6 (45)

Bota: 34 File: D: 2010 Report data \J\JIEHE\ACS10Q0886R2.EM6 (45)

Date: 2010-06-12

FCC PART 15 B (AVG)

15 .2 .5 1 2 5 10 20 30

Frequency (MHz)

Data No

:34

LISN phase:NEUTRAL

Engineer : Restar

Site no :Audix No.2 Conduction
Dis./Ant. :\*\* 2010 ENV4200
Limit :FCC PART 15 B
Env./Ins. :29.5\*C/55%

EUT :Mini PC M/N:Giada Slim-N20

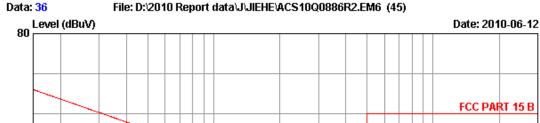
Power Rating :AC 120V/60Hz

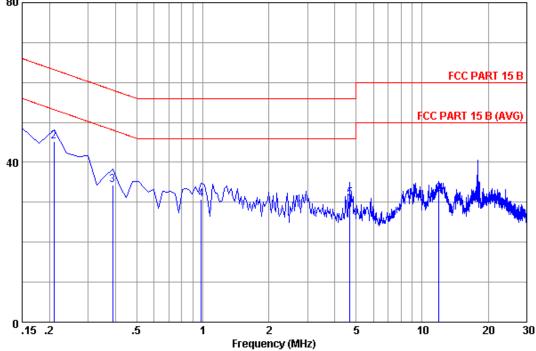
Test Mode :Running Burnin Test V5.3 VGA+HDMI:1280\*1024@75Hz



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Data No :36

LISN phase:LINE

Engineer :Restar

Site no :Audix No.2 Conduction Dis./Ant. :\*\* 2010 ENV4200

:FCC PART 15 B Limit :29.5\*C/55% Env./Ins.

:Mini PC M/N:Giada Slim-N20

Power Rating :AC 120V/60Hz

Test Mode :Running Burnin Test V5.3

VGA+HDMI:1920\*1200@60Hz

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	Limits (dBuV)	Margin (dB)	Remark
1	0.15000	10.11	9.87	25.52	45.50	66.00	20.50	QP
2	0.20970	10.14	9.87	25.17	45.18	63.22	18.04	QP
3	0.38880	10.17	9.88	14.22	34.27	58.09	23.82	QP
4	0.98580	10.19	9.89	10.77	30.85	56.00	25.15	QP
5	4.687	10.23	9.99	10.81	31.03	56.00	24.97	QP
6	11.911	10.39	10.29	11.52	32.20	60.00	27.80	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.

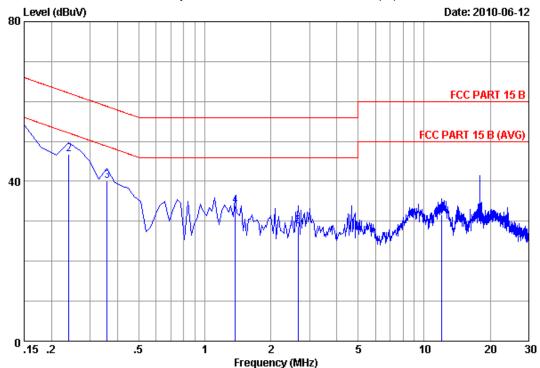
2. If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.



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Data No :35

LISN phase:NEUTRAL

Engineer :Restar

31.69 60.00 28.31

Site no :Audix No.2 Conduction
Dis./Ant. :\*\* 2010 ENV4200
Limit :FCC PART 15 B

Limit :FCC PART 15 B Env./Ins. :29.5\*C/55%

EUT :Mini PC M/N:Giada Slim-N20

Power Rating :AC 120V/60Hz

Test Mode :Running Burnin Test V5.3

VGA+HDMI:1920\*1200@60Hz

12.060 10.45 10.30 10.94

No	Freq (MHz)	LISN Factor (dB)	Cable Loss (dB)	Reading (dBuV)	Emission Level (dBuV)	n Limits (dBuV)	Margin (dB)	Remark
1	0.15000	10.22	9.87	31.16	51.25	66.00	14.75	OP
2	0.23955	10.18	9.87	26.68	46.73	62.11	15.38	QP
3	0.35895	10.19	9.88	20.07	40.14	58.75	18.61	QP
4	1.374	10.26	9.91	13.72	33.89	56.00	22.11	QP
5	2.657	10.29	9.95	8.61	28.85	56.00	27.15	QP

Remarks: 1.Emission Level=LISN Factor+Cable Loss(Include 10dB pulse limit)+Reading.

2.If the average limit is met when useing a quasi-peak detector. the EUT shall be deemed to meet both limits and measurement with average detector is unnecessary.

QP

# 4. RADIATED EMISSION TEST

# 4.1.Test Equipment

Frequency rang: 30~1000MHz

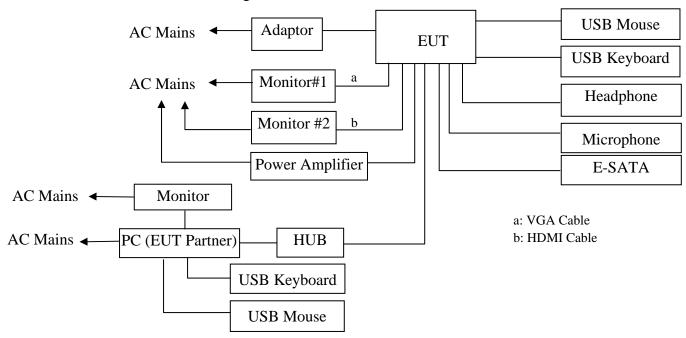
Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	10m Chamber	AUDIX	N/A	N/A	Dec.05,09	1 Year
2	EMC Analyzer	Agilent	E7405A	MY42000131	May.08, 10	1 Year
3	EMC Analyzer	Agilent	E7405A	MY45116588	May.08, 10	1 Year
4	Test Receiver	Rohde & Schwarz	ESCI	100842	May.08, 10	1 Year
5	Amplifier	Agilent	8447D	2944A10684	May.08, 10	1Year
6	Amplifier	Agilent	8447D	2944A11140	May.08, 10	1 Year
7	Bilog Antenna	Schaffner	CBL6112D	25238	Mar.27, 10	1 Year
8	Bilog Antenna	Schaffner	CBL6112D	25237	Mar.27, 10	1 Year
9	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.1	May.08, 10	1 Year
10	RF Cable	MIYAZAKI	8D-FB	10m Chamber No.2	May.08, 10	1 Year
11	Coaxial Switch	Anritsu	MP59B	6200766906	May.08, 10	1 Year
12	Coaxial Switch	Anritsu	MP59B	6200766905	May.08, 10	1 Year
13	Coaxial Switch	Anritsu	MP59B	6200313662	May.08, 10	1 Year

Frequency rang: above 1000MHz

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1	Spectrum Analyzer	Agilent	E4446A	US44300459	May.08, 10	1 Year
2	Horn Antenna	EMCO	3115	9510-4580	Nov.19, 09	1.5 Year
3	Horn Antenna	EMCO	3116	00060089	Nov.25, 09	1.5 Year
4	Amplifier	Agilent	8449B	3008A00863	May.08, 10	1 Year
5	RF Cable	Hubersuhner	SUCOFLEX102	28620/2	May.08, 10	1 Year
6	RF Cable	Hubersuhner	SUCOFLEX102	28618/2	May.08,10	1 Year
7	RF Cable	Hubersuhner	SUCOFLEX102	28610/2	May.08,10	1 Year

# 4.2.Block Diagram of Test Setup

4.2.1.Block Diagram of connection between EUT and simulators

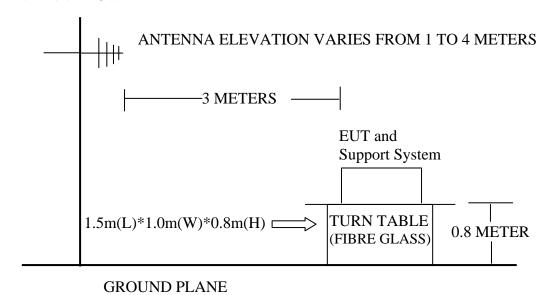


(EUT: Mini PC)

4.2.2. Anechoic Chamber Setup Diagram

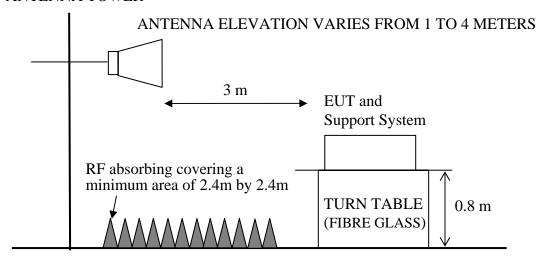
For frequency range from 30MHz to 1000 MHz.

# ANTENNA TOWER



For frequency range from 1GHz to 18GHz.

### ANTENNA TOWER



**GROUND PLANE** 

### 4.3. Radiated Emission Limit

Frequency	Distance	Field Strengths Limits
MHz	(Meters)	dB(μV)/m
30 ~ 88	3	40.0
88 ~ 216	3	43.5
216 ~ 960	3	46.0
960 ~ 1000	3	54.0
Above 1000	3	74(Peak)54(Average)

Remark: (1) Emission level = Antenna Factor + Cable Loss + Reading

- (2) The smaller limit shall apply at the cross point between two frequency bands.
- (3) Distance is the distance in meters between the measuring instrument, antenna and the closest point of any part of the device or system.

# 4.4.EUT Configuration on Test

The following equipment are installed on Radiated Emission Test to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

# 4.4.1. Mini PC (EUT)

Model Number : Giada Slim-N20

Serial Number : N/A

# 4.5. Operating Condition of EUT

- 4.5.1. Setup the EUT as shown in Section 4.2..
- 4.5.2. Turned on the power of all equipment.
- 4.5.3. PC run test software "BurnInTest.exe" to exercise all functions of EUT

### 4.6.Test Procedure

The EUT and its simulators are placed on a turn table, which is 0.8 meter high above ground. The turn table can rotate 360 degrees to determine the position of the

maximum emission level. The EUT is set 3 meters away from the receiving antenna, which is mounted on a antenna tower. The antenna can be moved up and down between 1 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bilog antenna) is used as receiving antenna. Both horizontal and vertical polarization of the antenna is set on Test. In order to find the maximum emission levels, all of the interface cables must be manipulated according to ANSI C63.4-2009 on radiated emission Test.

The bandwidth of the EMI test receiver (R&S ESVS10) is set at 120kHz for frequency range from 30MHz to 1000 MHz.

The bandwidth of the Spectrum's VBW is set at 3MHz and RBW is set at 1MHz for peak emissions measurement above 1GHz and 1MHz RBW, 10Hz VBW for average emissions measure above 1GHz

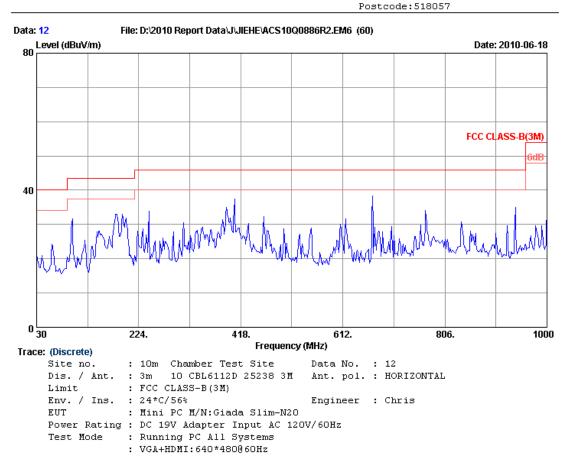
### 4.7. Radiated Emission Test Results

PASS.

# Test Frequency: 30MHz-1000MHz



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# Data: 11 File: D:\2010 Report Data\J\JIEHE\ACS10Q0886R2.EM6 (60) 80 Level (dBuV/m) Date: 2010-06-18 FCC CLASS-B(3M) 40 0 30 1000 224. 418. 612. 806. Frequency (MHz) Trace: (Discrete)

Data No. : 11

Ant. pol. : VERTICAL

Engineer : Chris

: 10m Chamber Test Site

: Running PC All Systems : VGA+HDMI:640\*480@60Hz

: Mini PC M/N:Giada Slim-N20 Power Rating : DC 19V Adapter Input AC 120V/60Hz

: FCC CLASS-B(3M)

: 3m

: 24\*C/56%

10 CBL6112D 25238 3M

Site no.

Limit

EUT

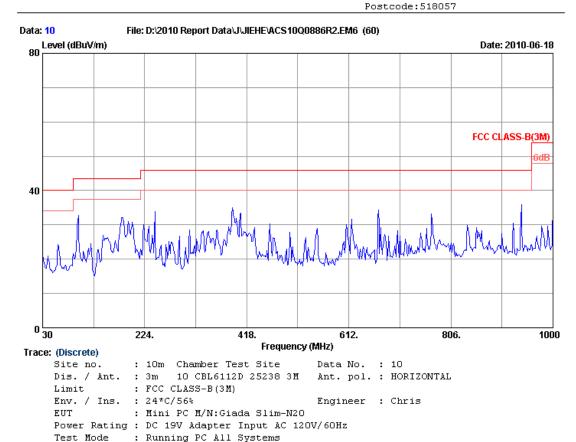
Dis. / Ant.

Env. / Ins.

Test Mode



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# Data: 9 File: D:/2010 Report Data/J/JIEHE/ACS10Q0886R2.EM6 (60) Date: 2010-06-18 FCC CLASS-B(3M) GdB 1000 Trace: (Discrete) Site no. : 10m Chamber Test Site Data No. : 9

10 CBL6112D 25238 3M

EUT : Mini PC M/N:Giada Slim-N20
Power Rating : DC 19V Adapter Input AC 120V/60Hz
Test Mode : Running PC All Systems
: VGA+HDMI:1280\*1024@75Hz

Dis. / Ant.

Env. / Ins.

Limit

: 3m

: FCC CLASS-B(3M) : 24\*C/56% Ant. pol. : VERTICAL

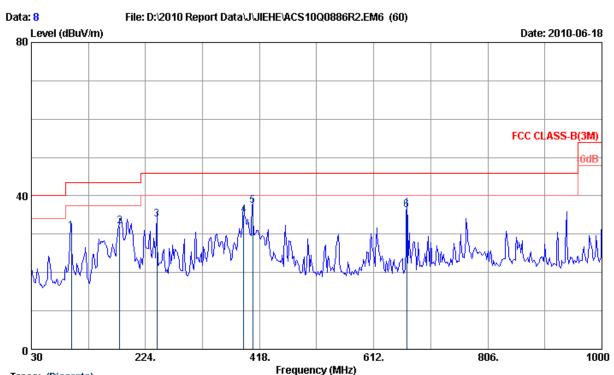
Engineer : Chris

: VGA+HDMI:1280\*1024@75Hz



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Trace: (Discrete)

: 10m Chamber Test Site Data No. : 8

Site no. Ant. pol. : HORIZONTAL Dis. / Ant. : 3m 10 CBL6112D 25238 3M

: FCC CLASS-B(3M)

Env. / Ins. : 24\*C/56% Engineer : Chris

: Mini PC M/N:Giada Slim-N20 Power Rating : DC 19V Adapter Input AC 120V/60Hz

: Running PC All Systems Test Mode : VGA+HDMI:1920\*1200@60Hz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	97.900	11.28	1.51	17.86	30.65	43.50	12.85	QP
2	180.350	9.90	1.97	20.19	32.06	43.50	11.44	QP
3	243.400	12.41	2.20	19.30	33.91	46.00	12.09	QP
4	390.840	16.15	2.68	16.23	35.06	46.00	10.94	QP
5	406.360	16.96	2.96	17.56	37.48	46.00	8.52	QP
6	668.260	19.58	3.85	12.94	36.37	46.00	9.63	QP
3 4 5	243.400 390.840 406.360	12.41 16.15 16.96	2.20 2.68 2.96	19.30 16.23 17.56	33.91 35.06 37.48	46.00 46.00 46.00	12.09 10.94 8.52	QP QP QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

2. The emission levels that are 20dB below the official limit are not reported.

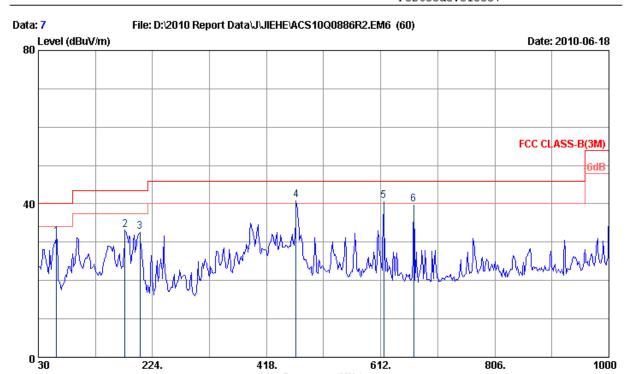
1000



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Trace: (Discrete)

Site no.

: 10m Chamber Test Site Data No. : 7

Frequency (MHz)

612.

Dis. / Ant. : 3m 10 CBL6112D 25238 3M Ant. pol. : VERTICAL

418.

: FCC CLASS-B(3M)

224.

Env. / Ins. : 24\*C/56% Engineer : Chris

: Mini PC M/N:Giada Slim-N20

Power Rating : DC 19V Adapter Input AC 120V/60Hz

: Running PC All Systems Test Mode : VGA+HDMI:1920\*1200@60Hz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	Emission Level dBuV/m)	Limits (dBuV/m)	Magin (dB)	Remark
1	61.040	6.52	1.35	23.53	31.40	40.00	8.60	QP
2	177.440	9.90	1.94	21.26	33.10	43.50	10.40	QP
3	202.660	10.10	2.03	20.54	32.67	43.50	10.83	QP
4	468.440	17.57	3.26	20.26	41.09	46.00	4.91	QP
5	616.850	19.24	3.75	17.82	40.81	46.00	5.19	QP
6	668.260	19.58	3.85	16.43	39.86	46.00	6.14	QP

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading.

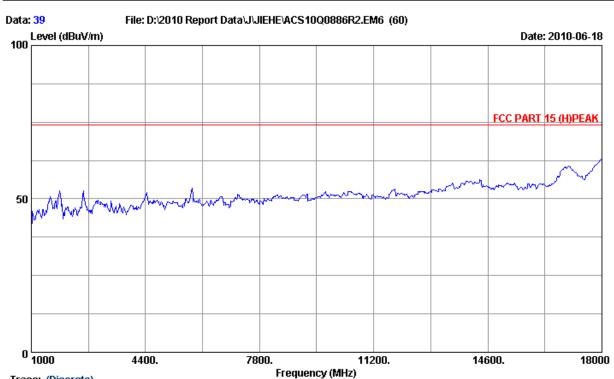
2. The emission levels that are 20dB below the official limit are not reported.

# **Test Frequency: Above 1GHz**



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Trace: (Discrete)
Site no.

: 10m Chamber Data No. : 39

Dis. / Ant. : 3m 2009 3115 ANT Ant. pol. : HORIZONTAL

Limit : FCC PART 15 (H) PEAK

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : Mini PC M/N:Giada Slim-N20

Power Rating : DC 19V Adapter Input AC 120V/60Hz

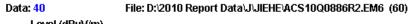
Test Mode : Running PC All Systems

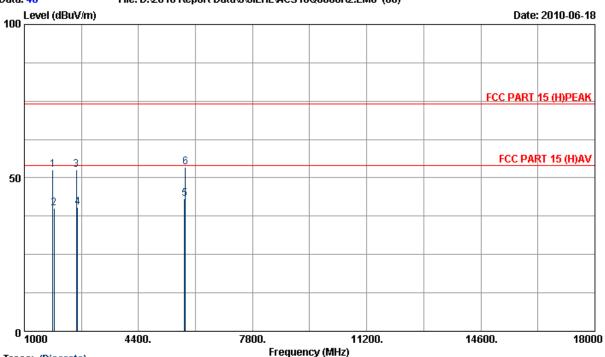
VGA+HDMI:1920\*1200@60Hz



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Trace: (Discrete)

Site no. : 10m Chamber Data No. : 40

Dis. / Ant. : 3m 2009 3115 ANT Ant. pol. : HORIZONTAL

: FCC PART 15 (H) PEAK

Env. / Ins. : 24\*C/56% Engineer : Chris

: Mini PC M/N:Giada Slim-N20 Power Rating : DC 19V Adapter Input AC 120V/60Hz

: Running PC All Systems Test Mode VGA+HDMI:1366\*768@60Hz

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
1 2 3 4 5	1850.165 1884.132 2547.224 2581.160 5777.074 5794.165	25.97 26.04 29.46 29.57 35.79 35.81	5.12 5.17 6.08 6.12 8.88 8.89	36.79 36.77 36.59 36.58 34.49 34.48	58.38 45.76 53.57 41.21 33.10 43.32	52.68 40.20 52.52 40.32 43.28 53.54	74.00 54.00 74.00 54.00 54.00 74.00	21.32 13.80 21.48 13.68 10.72 20.46	Peak Average Peak Average Average Peak

Remarks: 1. Emission Level=Antenna Factor+Cable Loss-Amp Factor+Reading.

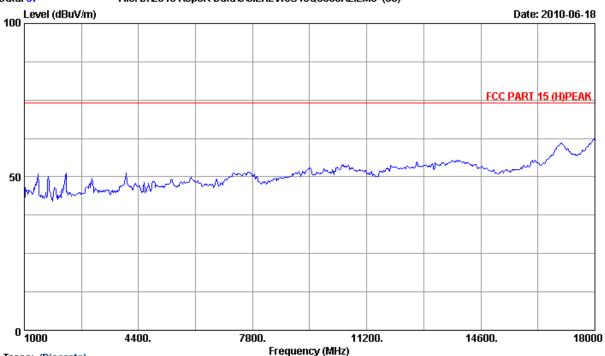
2. The emission levels that are 20dB below the official limit are not reported.



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Trace: (Discrete)

Site no. : 10m Chamber Data No. : 37

Dis. / Ant. : 3m 2009 3115 ANT Ant. pol. : VERTICAL

Limit : FCC PART 15 (H) PEAK

Env. / Ins. : 24\*C/56% Engineer : Chris

EUT : Mini PC M/N:Giada Slim-N20

Power Rating : DC 19V Adapter Input AC 120V/60Hz

Test Mode : Running PC All Systems VGA+HDMI:1920\*1200@60Hz

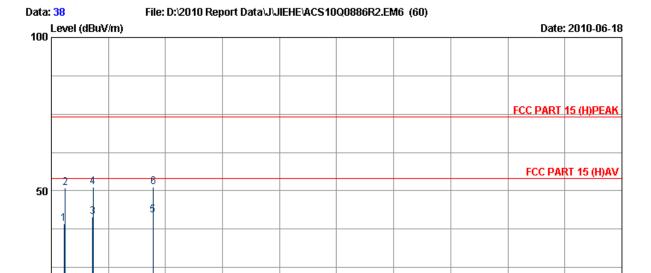
18000



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14600.

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Trace: (Discrete)

0 1000

: 10m Chamber Data No. : 38

Frequency (MHz)

11200.

Site no. Dis. / Ant. : 3m 2009 3115 ANT Ant. pol. : VERTICAL

7800.

: FCC PART 15 (H) PEAK

4400.

Env. / Ins. : 24\*C/56% Engineer : Chris

: Mini PC M/N:Giada Slim-N20

Power Rating : DC 19V Adapter Input AC 120V/60Hz

: Running PC All Systems Test Mode VGA+HDMI:1920\*1200@60Hz

2 1408.055 25.23 4.53 37.16 58.34 50.94 74.00 23.06 Peak 3 2224.315 27.64 5.63 36.66 44.78 41.39 54.00 12.61 Average 4 2241.165 27.75 5.66 36.65 54.54 51.30 74.00 22.70 Peak	_		Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	Amp Factor (dB)	Reading	Emission Level (dBuV/m)	Limits	Margin (dB)	Remark
		2 3 4 5	1408.055 2224.315 2241.165 4026.024	25.23 27.64 27.75 33.36	4.53 5.63 5.66 7.50	37.16 36.66 36.65 35.59	58.34 44.78 54.54 36.79	50.94 41.39 51.30 42.06	74.00 54.00 74.00 54.00	23.06 12.61 22.70 11.94	Average Peak Average

Remarks: 1. Emission Level=Antenna Factor+Cable Loss-Amp Factor+Reading.

2. The emission levels that are 20dB below the official limit are not reported.

# 5. DEVIATION TO TEST SPECIFICATIONS

[ NONE]