

AW-CM276NF

IEEE 802.11a/b/g/n/ac WLAN Microcontroller Module

Certification Guide

Ver. B



Revision History

Document release	Date	Modification	Initials	Approved	
А	2020/05/22	Initial Version	Selene Chang	Patrick Lin	
В	2021/10/29	Update certification ID and antenna list	Selene Chang	Patrick Lin	



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1. Certificate list of AW-CM276NF

AW-CM276NF is using NXP W8997, having CE, FCC, IC, NCC, AU/NZ, India, Japan certificates. Certificate ID are listed as below.

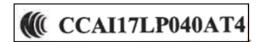
FCC ID: TLZ-CM276NF

The final end product must be labeled in a visible area with the following: Contains "FCC ID: TLZ-CM276NF"

IC: 6100A-CM276NF

The final end product must be labeled in a visible area with the following: Contains "IC: 6100A-CM276NF"

NCC ID: CCAI17LP040AT4



India: ETA-SD-20200906262



AU/N7

Japan:

■ TELEC: 020-200133

■ JATE: D200052020





2. Antenna Filing Policy

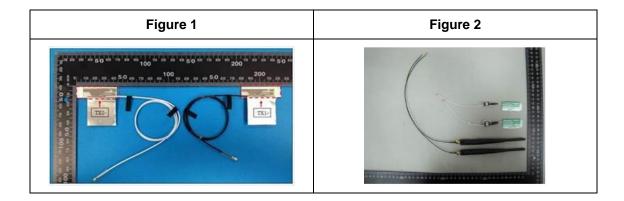
AW-CM276NF was certified with many antennas. The antenna list could be found in <u>Appendix 1</u>. If you have preferred antenna to be used with AW-CM276NF, antenna filing is necessary.

Before applying antenna filing, please notice that below policies

1. Antenna filing could be applied for the countries as below:

FCC, CE, IC, NCC and Japan.

- 2. The below information must be included in the data sheet of new antenna
 - Antenna Vendor and Part Number
 - Antenna peak gain table
 - Antenna pattern for each band (gains listed on plots must correctly match spec sheet summary table of gains)
 - Antenna photo (including antenna length/width with L type scale) (Figure 1 or Figure 2)
 - Antenna drawing (including length/width)
 - Antenna type
 - Antenna cable length
 - Connector type
 - IPEX Cable drawing if the antenna type is dipole



3. Reminder about Global Antenna Rules

- Please ensure that new antenna is PCB on board, PIFA, Dipole or Monopole type.
- Please ensure that the peak gain of new antenna is lower than AzureWave limits as Appendix 1.
- If new antenna has higher antenna gain value than <u>Appendix 1</u>, it will trigger FCC permissive change testing or re-test in the other countries.



- If new antenna has different type from current antenna list, re-testing is necessary and charge might have to be taken by requestor
- 4. Schedule of antenna filing for 2020 is listed as below. If there is extra requirement in addition to the regular schedule, the charge might have to be taken by requestor. For later schedule of antenna filing, please contact with AzureWave Sales or FAE.

Submit to AzureWave	Cutoff date	Start date	Completed date
2020/01/02	2020/01/08	2020/01/22	2020/02/06
2020/03/02	2020/03/11	2020/03/25	2020/04/29
2020/05/04	2020/05/13	2020/05/27	2020/06/24
2020/07/06	2020/07/15	2020/07/29	2020/08/26
2020/09/07	2020/09/16	2020/09/30	2020/10/28
2020/10/26	2020/11/04	2020/11/18	2020/12/16



Appendix 1

Antennas listed on FCC reports

Antenna Set	Brand	Model	Chain No.	Antenna Net. Gain(dBi)	Frequency range (MHz)	Antenna Type	Connector Type	Cable Length	
			Chain 0(Aux)	2.98	2400~2500	PIFA		15cm	
1	MAG LAYERS	MSA-4008-25GC1-A1	Gridin op idny	5.16	4900~5900		i-pex(MHF)	0.0000	
	W TO D TO LINE	111071 1000 2000 1711	Chain 1(Main)	2.98	2400~2500		· pax(iii ii /	15cm	
			, ,	5.16	4900~5900				
			Chain 0(Aux)	1.9	2400~2500	Dipole	RP-SMA	120mm	
2	Bondale	G-RA0K10090176-1436B	, ,	3.6	4900~5800				
			Chain 1(Main)	1.9	2400~2500			120mm	
				3.6	4900~5800				
			Chain 0(Aux)	2.4	2400~2500	- 1		120mm	
3	San Jose	UEN-201		4.4	4900~5800	Dipole	RP-SMA		
	147000100000000000000000000000000000000	0.76.00.00.00.000	Chain 1(Main)	2.4	2400~2500		0.000	120mm	
			Gridini T(mairi)	4.4	4900~5800			12UIIIII	
			Chain 0(Aux)	1.6	2400-2500	PCB	I-pex	100±5mm	
4	Unictron	H2B1PC1A1C175L	Oridin O(ridix)	4.8	5150~5850	1.00	1 pun		
-	O'llou o'l	TIEDIT OTTOTTOE	Chain 1(Main)	1.6	2400-2500	PCB	I-pex	100±5mm	
			Oriani ramani	4.8	5150~5850	FUB			
			Chain 0(Aux)	2	2400-2500	Dipole	RP-SMA	100mm	
5	LSR	001-0012	Chain 1(Main)	2	5150~5850	Dipole	RP-SMA	100mm	
	2011			2	2400-2500				
			Gridar r(mair)	2	5150~5850				
	Laird	MAF94051	Chain 0(Aux) Chain 1(Main)	2.4	2400-2500	Dipole Dipole	RP-SMA RP-SMA	100mm	
6				3.4	5150~5850				
				2.4	2400-2500				
		1		3.4	5150~5850		10.01-0.00		
	Taoglas	GW.59.3153	Chain 0(Aux) Chain 1(Main)	2.86 4.74	2400-2500	Dipole Dipole	RP-SMA	100mm 100mm	
7				1,000	5150~5850				
	110,00000000000000000000000000000000000			2.86 4.74	2400-2500 5150~5850				
				2.85	2400-2500				
			Chain 0(Aux) - Chain 1(Main) -	2.17	5150~5850	Dipole Dipole PCB	RP-SMA RP-SMA	100mm 100mm	
8	Chang Hong	DA-2458-02-SMR		2.85	2400-2500				
		Control of the Contro		3.13	5150~5850				
			200 300 000 16	2.8	2400-2500				
	5 1/8=/d/11/5	91900000000000000000000000000000000000	Chain 0(Aux)	4.2	5150~5850			100mm	
9	Unictron	H2B1PD1A1C385L	Terranea management	2.8	2400-2500	1000000 F	5,000,000	N. BROWNS	
			Chain 1(Main)	4.2	5150~5850	PCB	I-pex	100mm	
				2.562	2400-2500				
		0010011100	Chain 0(Aux)	3.094	5150~5850	PCB	I-pex	100mm	
10	Molex	2042811100	Chair 4/Main	2.562	2400-2500	PCB	I-pex	100mm	
			Chain 1(Main)	3.094	5150~5850	PCB	r-pex	roomin	
			Chain 0(Aux)	1.829	2400-2500	PCB	I-pex	100mm	
11	Molex	1461531100	Criain O(Adx)	2.485	5150~5850		· pun	10011111	
23241	WICHEA	1401001100	AND THE PROPERTY OF THE PROPER	Chain 1(Main)	1.829	2400-2500	PCB	I-pex	100mm
				2.485 2.98	5150~5850 2400-2500	10,000	100000000000000000000000000000000000000	100000000000000000000000000000000000000	
	and the second s	Chain 0(Aux	Chain 0(Aux)	5.16	5150~5850	PIFA	i-pex(MHF)		
12	MAG.LAYERS	MSA-4008-25GC1-A2		2.98	2400-2500			NA	
10000			Chain 1(Main)	5.16	5150~5850	PIFA i-pex(MHF)			



Antenna Set	Brand	Model	chain no.	Antenna Net Gain(dBi) included cable loss	Frequency range	Antenna Type	Connector Type	Cable Length	
			01 : 0/4 \	2.7	2400-2500	PCB PCB	IPEX 4L	30mm	
13	harmana	5-PP005049	Chain 0(Aux)	4.4	5150~5850				
13	lynwave		Chain 1(Main)	2.7	2400-2500		IPEX 4L	30mm	
				4.5	5150~5850				
Newly									
Antenna Set	Brand	Model	chain no.	Antenna Net Gain(dBi) included cable loss	Frequency range	Antenna Type	Connector Type	Cable Length	
14	PULSE	PULSE W3315BD0150 (AUX)	Chain 0(Aux)	-0.46	2400-2500	PCB	ipex(MHF)	15cm	
14			Chain 1(Main)	-0.51	5150~5850	PCB	ipex(MHF)	15cm	
15	PULSE		WOOAEDDOAGO (MAIN)	Chain 0(Aux)	0.15	2400-2500	PCB	ipex(MHF)	10cm
15		LSE W3315BD0100 (MAIN)	Chain 1(Main)	1.57	5150~5850	PCB	ipex(MHF)	10cm	



Antennas listed on CE reports

Antenna Set	Brand	Model	Chain No.	Antenna Net. Gain(dBi)	Frequency range (MHz)	Antenna Type	Connector Type	Cable Length					
112			Chain 0(Aux)	2.98	2400~2500	PIFA	i-pex(MHF)	45					
	MAGLAVEDO	MCA 4000 05004 A4		5.16	4900~5900			15cm					
1	MAG.LAYERS	MSA-4008-25GC1-A1		2.98	2400~2500			45					
			Chain 1(Main)	5.16	4900~5900			15cm					
				1.9	2400~2500		RP-SMA	122					
<u>22</u>	211997		Chain 0(Aux)	3.6	4900~5800	220 00		120mm					
2	Bondale	G-RA0K10090176-1436B	District Contract to No.	1.9	2400~2500	Dipole		7,122					
			Chain 1(Main)	3.6	4900~5800	1		120mm					
			A LONG TO STATE OF THE STATE OF	2.4	2400~2500			brasenoemen					
120			Chain 0(Aux)	4.4	4900~5800	1		120mm					
3	San Jose	UEN-201		2.4	2400~2500	Dipole	RP-SMA						
			Chain 1(Main)	4.4	4900~5800	1 1		120mm					
				1.6	2400-2500		1						
		222 22 222	Chain 0(Aux)	4.8	5150~5850	PCB	I-pex	100±5mm					
4	Unictron	H2B1PC1A1C175L	-110 martin Y	1.6	2400-2500	PCB	82	100000					
			Chain 1(Main)	4.8	5150~5850		I-pex	100±5mr					
				2	2400-2500	Dipole	Di-J-			and the second s			
		922302000	Chain 0(Aux)	2	5150~5850		RP-SMA	100mm					
5	LSR	001-0012	Chain 1(Main)	2	2400-2500	Dipole	RP-SMA	100mm					
				2	5150~5850								
	Laird	MAF94051	Chain 0(Aux)	2.4	2400-2500	Dipole	RP-SMA	100mm					
				3.4	5150~5850								
6			Chain 1(Main)	2.4	2400-2500	Dipole	RP-SMA	100mm					
				3.4	5150~5850								
			Ob-i- 0/A	Chain O/Aux)	2.86	2400-2500	Dinole	RP-SMA	100mm				
7	Taoglas	GW.59.3153	Chain 0(Aux)	4.74	5150~5850	Dipole Dipole	RP-SMA	100mm					
,	raogias	GW.59.5155		2.86	2400-2500								
			Criditi I(Walii)	4.74	5150~5850	Dipole							
			Chain 0(Aux)	2.85	2400-2500	Dipole	RP-SMA	100mm					
8	Chang Hong	DA-2458-02-SMR	Chain O(Aux)	2.17	5150~5850	Dipole	Tu -Ollar	10011111					
0	Chang Hong	DA-2400-02-0MIN	Chain 1(Main)	2.85	2400-2500	Dipole	RP-SMA	100mm					
			Chain 1(Main)	3.13	5150~5850	Dipole	AF-SIVIA	TOUTHIN					
			Chain 0(Aux)	2.8	2400-2500	PCB	I-pex	100mm					
9	Unictron	H2B1PD1A1C385L	Gridan S(riday)	4.2	5150~5850		· pan	10011111					
	0111011011		Chain 1(Main)	2.8	2400-2500	PCB	I-pex	100mm					
			- Cricary (Cricary)	4.2	5150~5850	FOD	1-pex						
	100000	(CO) (CO) (C. C. D. BOTO (CO) - CO	Chain 0(Aux)	2.562 3.094	2400-2500	PCB	I-pex	100mm					
10	Molex	2042811100		2.562	5150~5850 2400-2500	200	5,000	100					
			Chain 1(Main)	3.094	5150~5850	PCB	I-pex	100mm					
				1.829	2400-2500	2.0	10	WES					
44	Molex	1464524400	Chain 0(Aux)	2.485	5150~5850	PCB	I-pex	100mm					
11		1461531100		Chain 1/Main	1.829	2400-2500	РСВ	Loav	100mm				
				2.485 5150~5850	I-pex	TOUMM							
			Chain 0(Aux)	2.98	2400-2500	PIFA	i-pex(MHF)						
12	MAG.LAYERS	GLAYERS MSA-4008-25GC1-A2	Criairi O(Max)	5.16	5150~5850		-pex(wriP)	NA					
12	MAG.LATERS		Chain 1(Main)	2.98 5.16	2400-2500 5150~5850	PIFA i-p	i-pex(MHF)	STON					

Antenna Set	Brand	Model	chain no.	Antenna Net Gain(dBi) included cable loss		Antenna Type	Connector Type	Cable Length
13 lynwave		,	Chain 0(Aux)	2.7 4.4	2400-2500 5150~5850	PCB	IPEX 4L	30mm
	lynwave		Chain 1(Main)	27	2400-2500	DOD	IPEX 4L	30mm
				4.5	5150~5850	PCB		