

承認書

Product Specification

Rev.A

客戶名稱：Ubiquconn Co., Ltd

CUSTOMER

適用機種：VM521

APPLICATION

廠 商：Ethertronics Inc.

SUPPLIER

客戶料號：21-93067-01

PART NUMBER

Ethertronics 料號：5001546

PART NUMBER

承認日期：Nov., 2014

APPROVAL DATE

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Product Specification
Part Number: 5001546
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Revision History

Rev. A	Initial Product Specification.
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1. Purpose and Scope

The purpose of this document is to establish a design specification for the antenna product that Ethertronics is developing for the wireless devices. Any changes or additions to this specification can affect schedule, cost or the product and should be negotiated between Ethertronics and Ubiqconn before being incorporated into the specification. Upon agreement of this specification, Ethertronics will make no changes without the written approval from Ubiqconn. Any changes requested by Ubiqconn will be given to Ethertronics with sufficient time to evaluate the cost impact and reach as required.

2. Abbreviations and Definitions

AVG	Average
°	Degree
°C	Celsius (degrees Centigrade)
cm	Centimeter
G	Gravitational Force
g	Grams
Hz	Hertz
In	Inches
IQC	Incoming Quality Control
MHz	Megahertz
m	Meter
mm	Millimeter
N	Newton
PCB	Printed Circuit Board
TX	Transmit Band
RH	Relative Humidity
RX	Receive Band
VSWR	Voltage Standing Wave Ratio
W	Watt

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3. Electrical Specification For

3.1 Frequency Band

Mode	Frequency Band (MHz)
WLAN IN2 V02	2.4G-2.5G, 5.15G-5.85G
WLAN IN1 V04	2.4G-2.5G, 5.15G-5.85G

3.2 Electrical Characteristics

3.2.1 VSWR

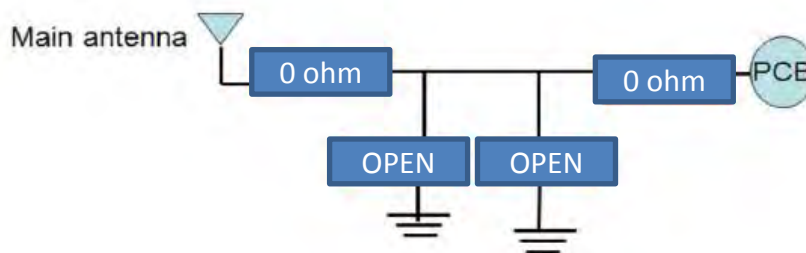
3.2.2 S11

3.2.3 Passive Measurement

3.2.4 Peak gain & Average Gain

Please refer to the next few pages.

3.3 Matching Requirements



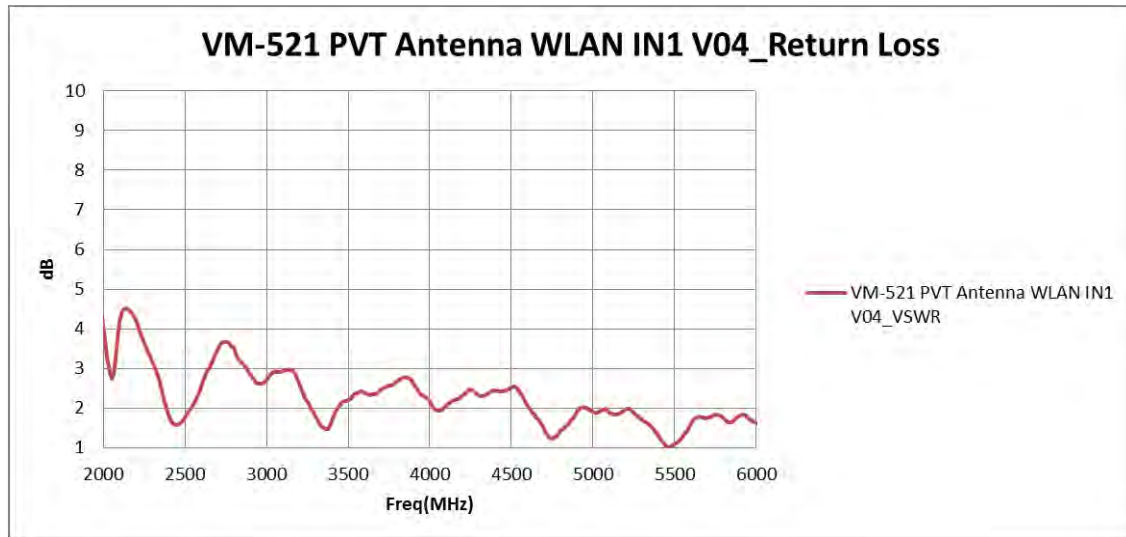
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3.2.1 VSWR



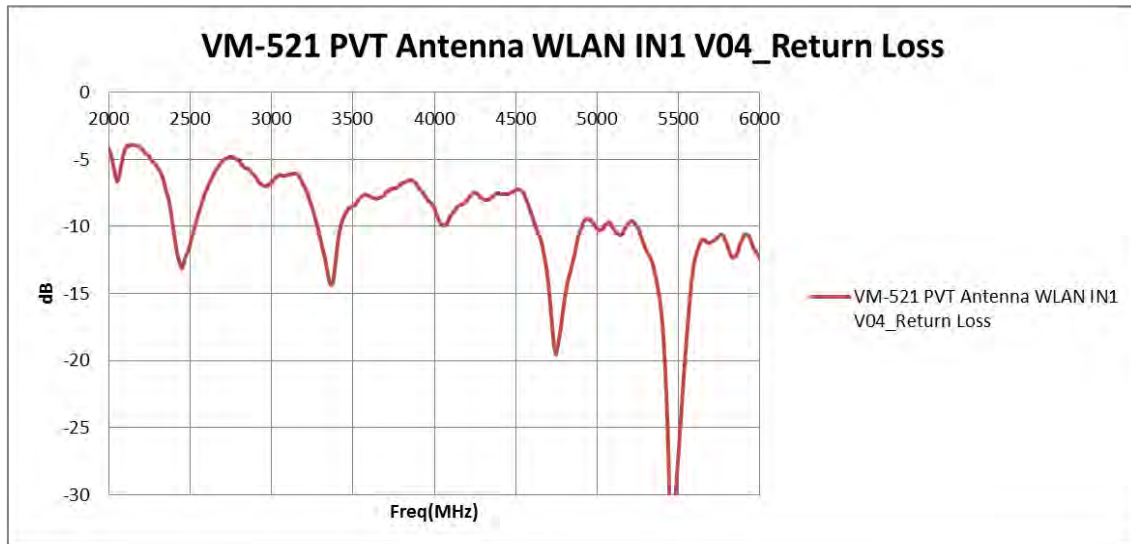
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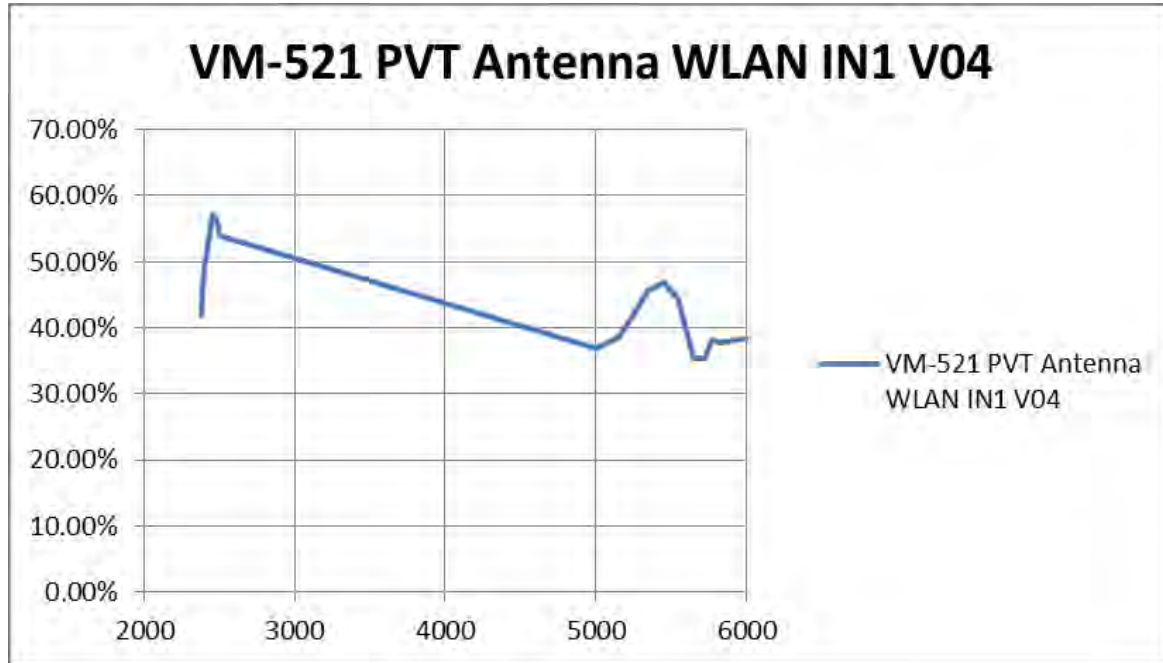
3.2.2 S11



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3.2.3 Passive Measurement



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3.2.4 Peak Gain and Average Gain

VM-521 PVT Antenna WLAN IN1 V04 (UTI P/N: 21-93067-01 ET P/N: 5001546)			
Frequency	Peak. dBi	Efficiency	Average . dB
2380	2.07	41.84%	-3.78
2400	2.69	49.20%	-3.08
2420	2.81	51.36%	-2.89
2442	3.03	54.39%	-2.64
2460	3.17	57.24%	-2.42
2484	2.93	56.31%	-2.49
2500	2.67	54.02%	-2.67
5000	4.29	36.96%	-4.32
5150	4.63	38.49%	-4.15
5250	4.61	41.84%	-3.78
5350	4.73	45.63%	-3.41
5450	4.46	46.83%	-3.29
5550	4.35	44.38%	-3.53
5650	3.15	35.43%	-4.51
5725	3.36	35.25%	-4.53
5775	4.05	38.09%	-4.19
5825	4.05	37.83%	-4.22
6000	4.03	38.41%	-4.16

4. Drawing and Materials

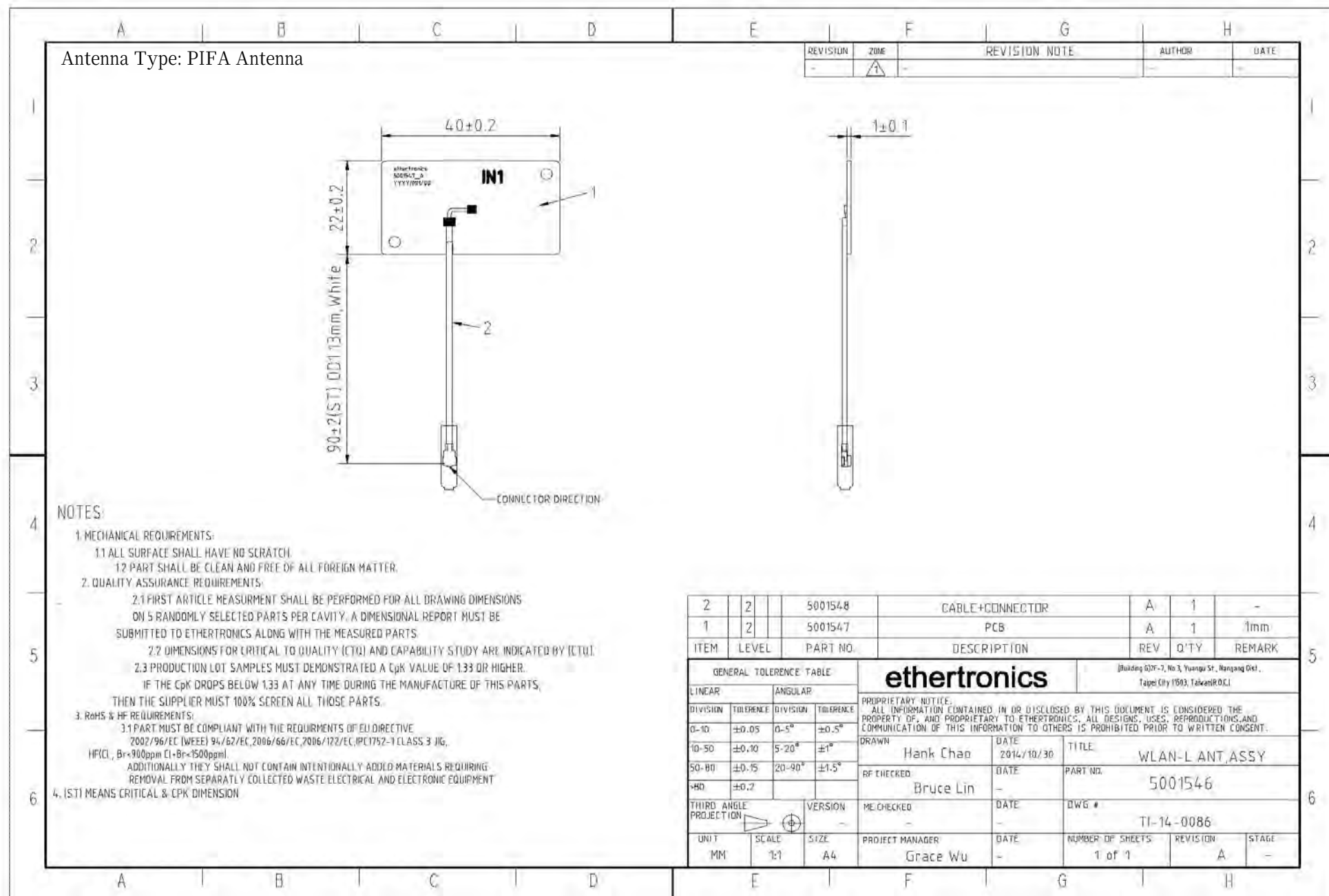
4.1 Drawing of Internal Antenna

Please refer to the next page.

4.2 Part List

Part Name	Material	BOM	Finish	Q'ty
ANTENNA ASSEMBLY P/N: 5001546 Unitech P/N : 21-93067-01	PCB , WLAN (Left)	5001547	Ethertronics	1
	Cable+Connector , WLAN (Left)	5001548		

4.1 Drawing of Internal Antenna





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5. QA Inspection

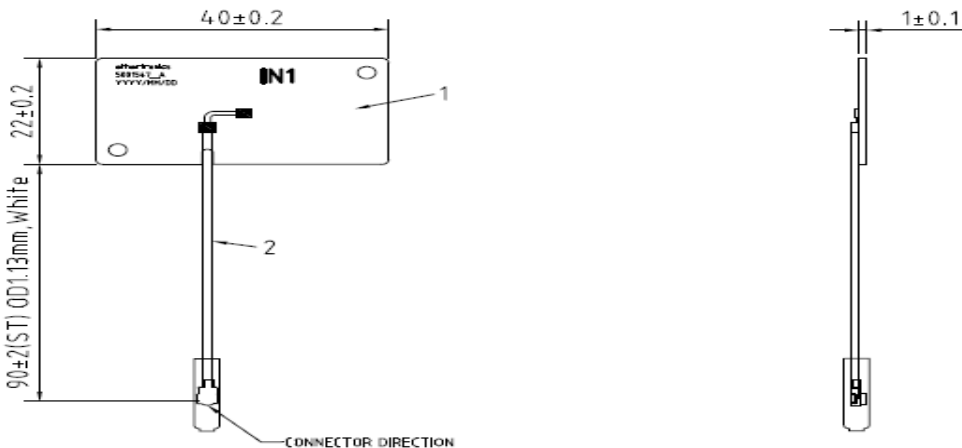
5.1 Incoming Inspection

Please refer to the documents in following pages for 5001546.

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Assembly Inspection Plan 组装检验控制计划

Project Name /Project No.		VM521		Drawing Rev	AIP Rev	Date	Description of Change	
项目名称/项目编号				图纸版本	AIP版本	日期	更改记录	
ET No.		5001546		A	A	2014.10.30	初次发行	
ET 编 号								
Description								
产 品 名 称								
Material / Color								
产 品 材 料 / 颜 色								
Process Name		Frequency		Visual	Measurement		RF test	
过程名称		频次		外 观	尺 寸		频率测试	
First off 首件		Every Pro 每次生产	5PCS, C=0	5PCS, C=0		5-10Pcs,C=0		
Production full Check 生产		Every pcs 每件	100%	No		100%		
In-process 过程		2 hours 每2小时	5PCS,C=0	5PCS, C=0		5PCS,C=0		
		4 hours 每4小时						
Final product 最终检验		Per Lot 每批	AQL 0.4	10PCS		5-10Pcs,C=0		
Outgoing		Per Shipment 每次出货	100% check packaging and labels					
S/No 编号	Specification / Function 产品标准 / 功能		Class 等 级	Check Method 检测方法	First part 首件	Self Check 自检	FQC 最终检验	OQC 出货检验
1 性能	RF频率测试		A					
	根据RF测试程序.			RF 测试仪	Yes	Yes	Yes	No
2 外观	产品结构完整，颜色正确，无划伤、撞伤、裂纹、起皮、气泡、杂质、针孔、变形、漏铜、字符模糊缺失、焊点无缺焊、过焊等，端子铆压卡抓无歪斜、压伤、破损、过压、端子朝向与图纸相符等		N	目测	Yes	Yes	Yes	Yes
	端子铆压高度在端子铆压公差内（参照端子供应商端子铆压图纸）。		N	带表卡尺/治具	Yes	Yes	Yes	Yes
尺寸	40+/-0. 2mm			2.5D	Yes	NO	Yes	Yes
	22+/-0. 2mm			2.5D	Yes	NO	Yes	Yes
	1+/-0. 1mm			2.5D	Yes	NO	Yes	Yes
	90+/-2mm		ST	2.5D	Yes	NO	Yes	Yes
								
Testing 测试相关	ORT	Testing Part 测试部件	Testing Name 测试名称	Testing conditions/standard 测试条件/标准	Testing Instrument 测试仪器	Testing quantity 测试数量	Testing Frequency 测试频率	Judgment Standard 判定标准
	HSF							
Others 其他								
1	Packaging 包装	refer to "the requirement of the packing SOP					参考"包装要求SOP	
2	Shipping Docume 发货文件	Certification of Conformance					附出货检验报告	
3	Outgoing Inspecti 出货检验	No product damaged;No. of part and carton with diff product;corrcect lable without damaged					无产品破损;混装;标签正确且无破损	
4	Remarks 备注							
Item	Edited by 编制	Reviewed by 审核			Approved by 批准			
Name	许双全	Carb			lesley			
Sign								
Date	2014.10.30	2014.10.30			2014.10.30			

6. Caution For Use

6.1 Storage

- * Please keep the product away from high temperature and high humidity.
- * Please keep product away from corrosive gases such as hydrogen sulfide, sulfurous acid, chlorine, ammonia, etc... The acid could cause the metal antenna to corrode degrading antenna performance.

6.1.1 Storage Condition 1

Temperature:	5 to 35 °C
Humidity:	45 to 75 %RH
Period:	6 months from date of packaging

6.1.2 Storage Condition 2

Temperature:	- 40 to 90 °C
Humidity:	96 %RH Max
Period:	96 hours

6.2 Handling

- * It is important to handle the antenna carefully and bending or dents made into the metal will cause the antenna to detune and could cause performance issues.
- * Please do not touch product directly with bare hands, this will put fingerprints on the antenna and the acids in the hand will cause the antenna to discolor. While this will not have a performance effect it does have a cosmetic effect on the part.



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7. ROHS

Please refer to the ROHS reports.

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