



PRODUCT NAME

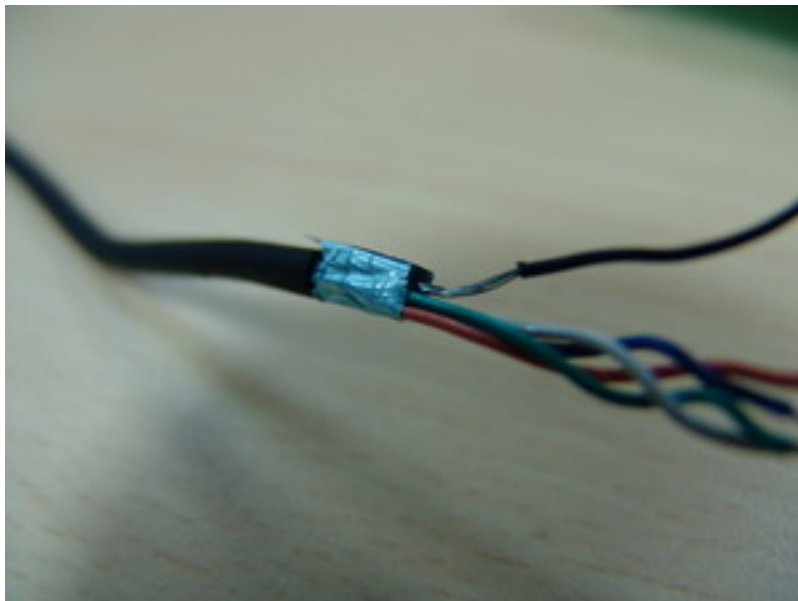
TP66P08 for A2610 Sensor USB Mouse Driver

TITLE

USB Mouse for EMI & ESD & EFT Report

APPLICATION NOTE

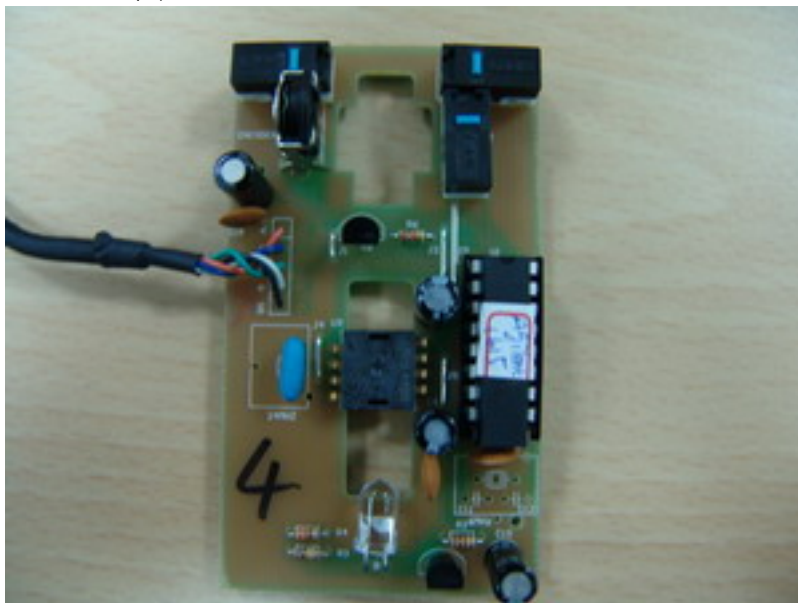
1. 使用線材無編織網有銅箔(編號 1)



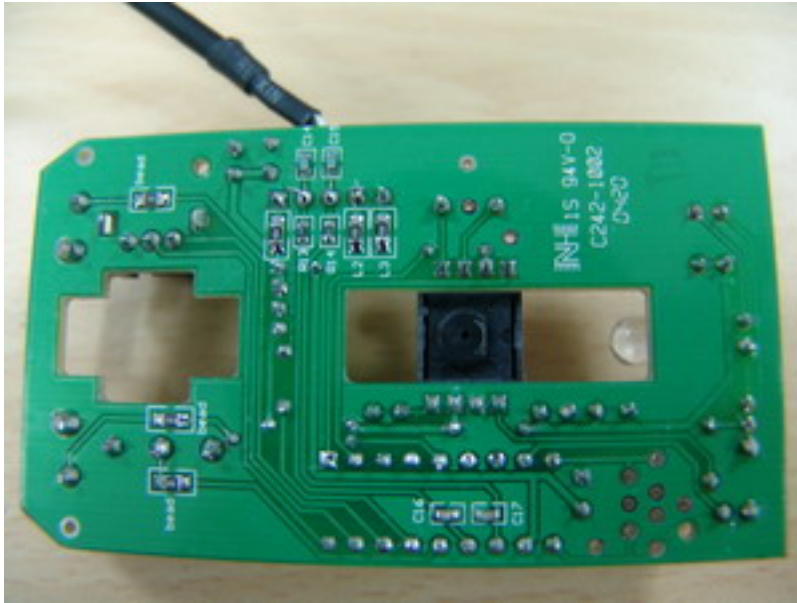
2. Housing



3. PCB 正面



4. PCB 背面



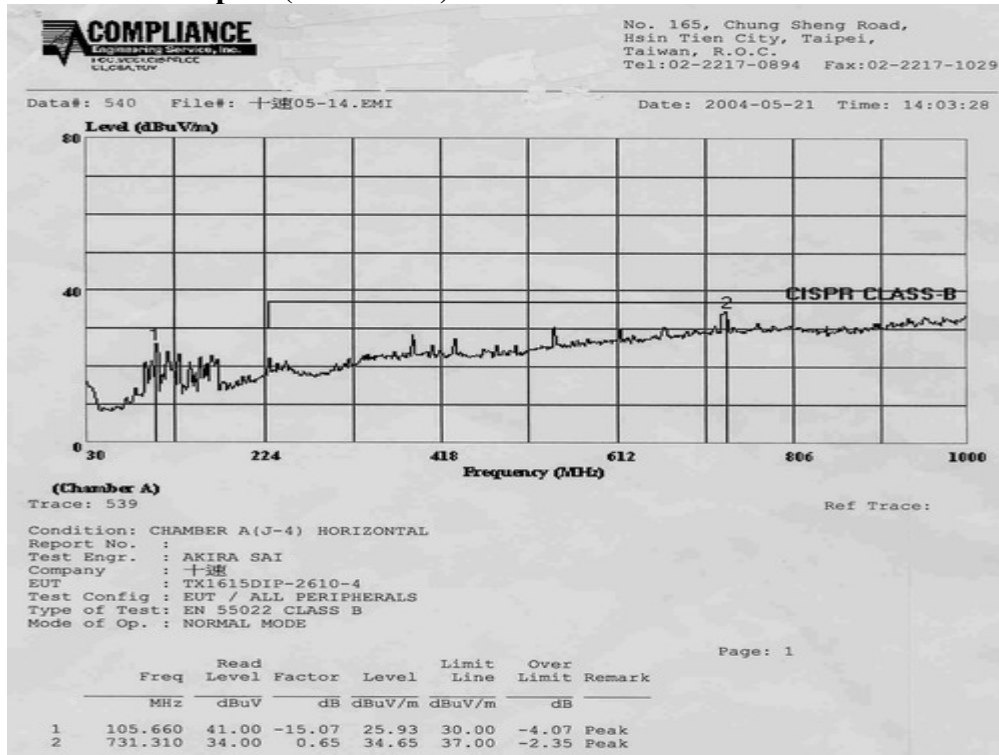
5. PCB + Housing



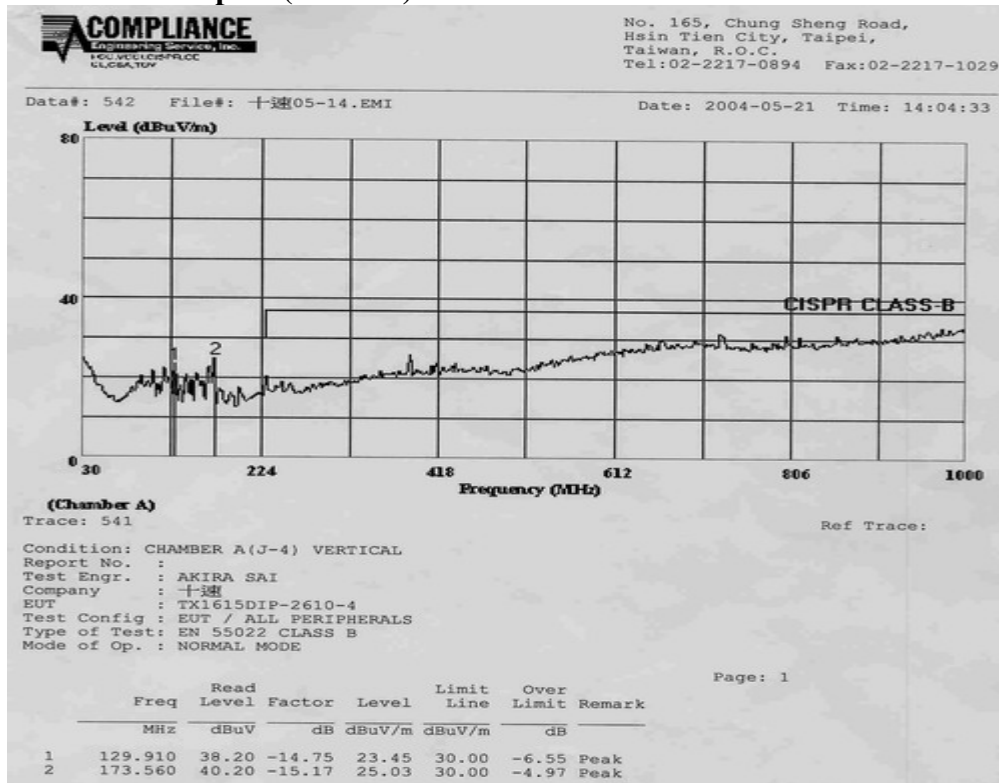
8. BOM 表

編號	元件數量	元件編號	元件數值	尺寸	備註
1	1	C3	2.2uF	DIP	
2	1	C4	4.7uF	DIP	
3	3	C5,C6,C18	0.1uF	DIP	靠近 I/O 及 IC
4	1	C10	1uF	DIP	
5	1	C13	10uF	DIP	靠近 I/O
6	2	C14,C15	10pF	SMD 0603	靠近 I/O
7	2	C16,C17	15pF	SMD 0603	靠近 IC
8	1	D4	LED		
9	3	RB,MB,LB	SW PUSHBUTTON		
10					
11	1	P1	USB CONN		
12	2	Q2,Q1	2N3906	DIP	
13	2	R6,R2	1K Ω	DIP 1/8W	
14	1	R3	100K Ω	DIP 1/8W	
15	1	R4	33 Ω	DIP 1/8W	
16	2	R14,R13	22 Ω	SMD 0603	靠近 I/O
17	1	U1	TP66P06	DIP	
18	1	U2	ENCODER		
19	1	U3	ADNS-2610		
20	1	Y2	24M	DIP	靠近 SENSOR

9. EMI Test Report (Horizontal)



10. EMI Test Report (Vertical)



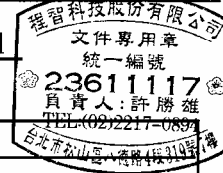
11. ESD Test Report



程智科技股份有限公司
Compliance Certification Services Inc.

表格編號: FM-022A
版本: R03
文件編號: PA-022

Electrostatic Discharge Test Record



Customer: <u>士達</u>	Test Date: <u>2004/6/11</u>
EUT Name: <u>Mouse</u>	Temp: <u>20</u> °C; Hum: <u>60</u> %; Press <u>1015</u> mbar
M/N: <u>TP66P08</u>	Tester: <u>Alex Pan</u>
Test Mode: <u>Normal</u>	Supervisor: <u>Spring Wang</u>

Item	Voltage (kV)		Results		Remark
			Pass	Fail	
Air Discharge	+	8	✓		
	-	8	✓		
Contact Discharge	+	4	✓		
	-	4	✓		
Indirect Discharge HCP	+	4	✓		
	-	4	✓		
Indirect Discharge VCP (Front)	+	4	✓		
	-	4	✓		
Indirect Discharge VCP (Left)	+	4	✓		
	-	4	✓		
Indirect Discharge VCP (Back)	+	4	✓		
	-	4	✓		
Indirect Discharge VCP (Right)	+	4	✓		
	-	4	✓		

Criteria : A B C

12. EFT Test Report



程智科技股份有限公司
Compliance Certification Services Inc.

表格編號: FM-024A
版本: R03
文件編號: PA-024

Electrical Fast Transient/Burst Test Record



Customer: 十波 Test Date: 2004/6/11
 EUT Name: Mouse Temp: 20 °C; Hum: 60 % ; Press 1015 mbar
 M/N: TP66P08 Test Mode: Normal
 Voltage: Direct 1 kV Tester: Alex Pan Supervisor: Spring Wang
 Clamp _____ kV

Inject Line	Inject Method	Results		Inject Line	Inject Method	Results	
		Pass	Fail			Pass	Fail
L1	Direct	✓			Clamp		
N	Direct	✓			Clamp		
PE	Direct	✓			Clamp		
L1+N	Direct	✓			Clamp		
L1+PE	Direct	✓			Clamp		
N+PE	Direct	✓			Clamp		
L1+N+PE	Direct	✓			Clamp		
	Direct				Clamp		
	Direct				Clamp		
	Direct				Clamp		
	Direct				Clamp		

Remark :

Criteria : A B C

P.S "此測試結果僅針對與測試報告中相同的 PCB Layout, USB 線材與 Housing等條件, 對於不同的設計條件須視實際需要做調整,以符合 EMC 的規範."