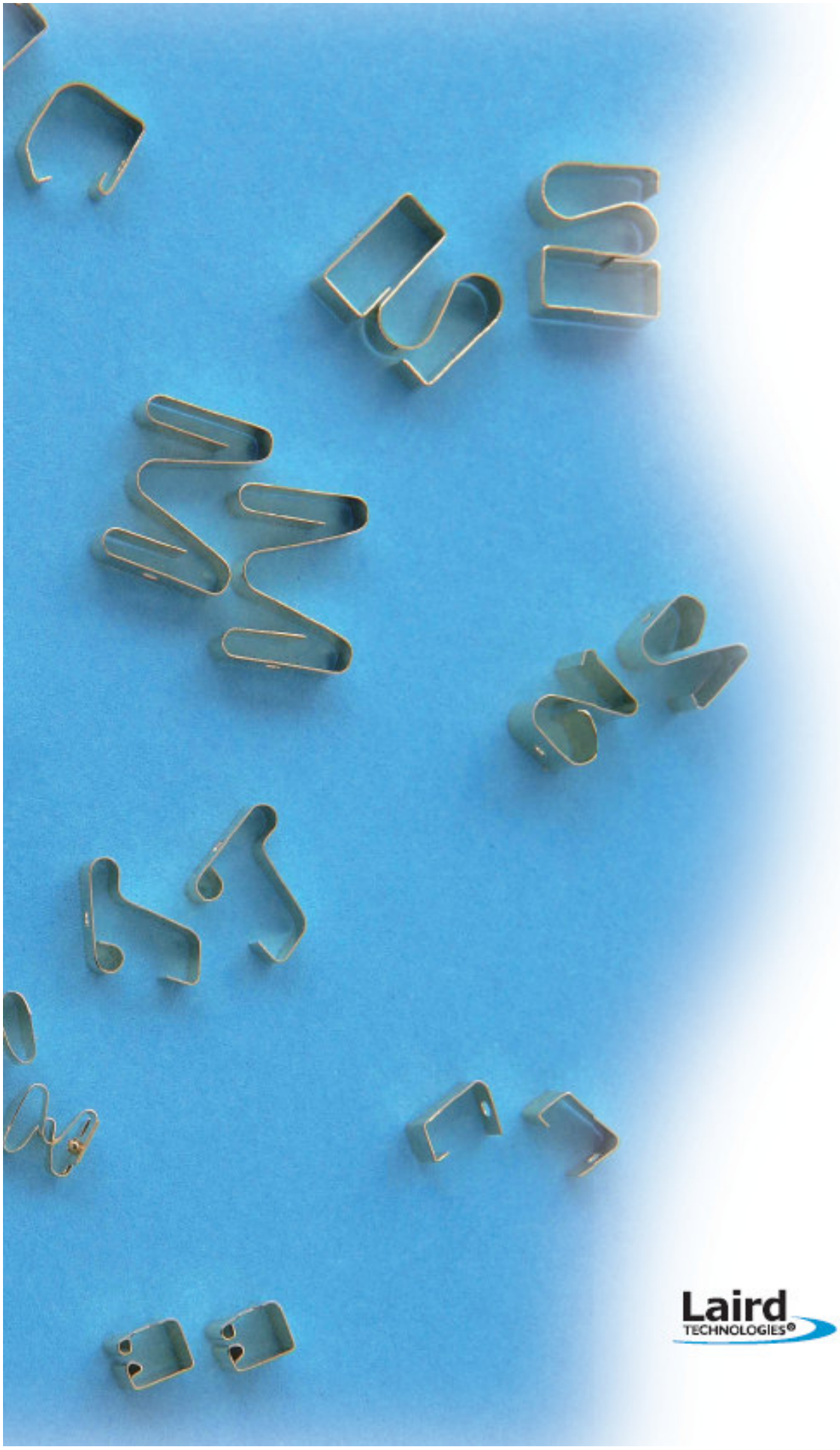

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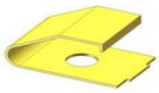
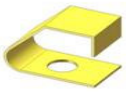
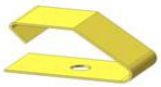
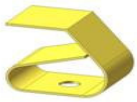
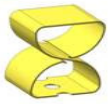
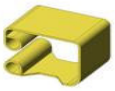
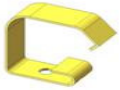
SMD finger overview

BCG-20X32X015 	TCG-15X27X020 	BCG-20X40X020 	BCG-25X40X021 	BCG-20X30X025 
BDS-20X35X027 	B6G-20X75X030 	B5G-20X30X031 	BCG-20X30X040 	BCG-25X30X040 
BXG-25X35X040 	B5G-25X40X041 	BCG-25X45X048 	BCG-25X40X050 	B5G-40X40X051 
BCG-20X40X053 	BCG-25X40X055 	BCG-20X47X057 	B5G-25X45X060 	B5G-20X70X062 
BSG-20X45X070 	B3G-25X48X070 	BSG-25X65X080 	B3G-25X70X090 	B3G-30X30X100 
BSG-25X70X120 	BDG-25X60X058 	B8G-20X45X045 	BCG-20X38X020 	BCG-25X43X035 
B8G-30X40X051 	SDG-25X34X027 	B8G-20X40X037 	BCG-20X60X060 	BCG-25X40X060 
TCG-15X27X020 	BCG-20X60X040 	B7G-25X40X050 	BCG-20X58X050 	B4G-25X40X054 
BCG-25X50X054	B8G-25X70X062	B3G-25X48X100	BCG-40X40X080	BCG-20X45X048
BCG-20X35X031	BCG-25X41X025	BCG-20X35X035	BCG-20X32X35	BCG-20X40X055
B8G-25X150X100	B5G-95X47X60	BCS-30X66X70		

SMD finger specification(1/2)

Finger P/N	Finger Shape	Finger Width (mm)	Finger Length (mm)	Finger Height (mm)	Material	Plating Type	Stroke	Remark
B3G-25X48X070	3	2.5	4.8	7	BeCu	Au	0.50~2.50	
B3G-25X48X100	3	2.5	4.8	10	BeCu	Au	0.10~3.00	
B3G-25X70X090	3	2.5	7	9	BeCu	Au	0.10~2.50	
B3G-30X60X100	3	3	6	10	BeCu	Au	0.10~3.00	
B4G-25X40X054	4	2.5	4	5.4	BeCu	Au	0.20~2.00	
B5G-20X30X031	5	2	3	3.1	BeCu	Au	0.30~1.00	
B5G-20X70X062	5	2	7	6.2	BeCu	Au	0.70~2.70	
B5G-25X40X041	5	2.5	4	4.1	BeCu	Au	0.30~1.50	
B5G-25X45X060	5	2.5	4.5	6	BeCu	Au	0.30~2.50	
B5G-40X40X051	5	4	4	5.1	BeCu	Au	0.50~2.00	
B5G-95X47X060	5	9.5	4.7	6	BeCu	Au	0.30~2.50	
B6G-20X75X030	6	2	7.5	3	BeCu	Au	NA	side contact
B7G-25X40X050	7	2.5	4	5	BeCu	Au	0.25~1.50	
B8G-20X40X037	8	2	4	3.7	BeCu	Au	0.50~1.20	
B8G-20X45X045	8	2	4.5	4.5	BeCu	Au	0.50~1.50	
B8G-25X150X100	8	2.5	15	10	BeCu	Au	0.20~1.00	
B8G-25X70X062	8	2.5	7	6.2	BeCu	Au	0.50~2.50	
B8G-30X40X051	8	3	4	5.1	BeCu	Au	0.50~1.80	
BCG-20x30x025	C	2	3	2.5	BeCu	Au	0.25~0.80	
BCG-20X30X040	C	2	3	4	BeCu	Au	0.30~1.20	
BCG-20X32X015	C	2	2.3	1.5	BeCu	Au	0.20~0.50	
BCG-20X32X035	C	2	3.2	3.5	BeCu	Au	0.50~1.50	
BCG-20X35X031	C	2	3.5	3.1	BeCu	Au	0.30~1.00	
BCG-20X35X035	C	2	3.5	3.5	BeCu	Au	0.30~1.00	
BCG-20X38X020	C	2	3.8	2	BeCu	Au	0.30~0.50	
BCG-20X40X020	C	2	4	2	BeCu	Au	0.30~0.60	

SMD finger specification(2/2)

Finger P/N	Finger Shape	Finger Width (mm)	Finger Length (mm)	Finger Height (mm)	Material	Plating Type	Stroke	Remark
BCG-20X40X053	C	2	4	5.3	BeCu	Au	0.30~2.00	
BCG-20X40X055	C	2	4	5.5	BeCu	Au	0.50~2.50	
BCG-20X45X048	C	2	4.5	4.8	BeCu	Au	0.50~1.80	
BCG-20X47X057	C	2	4.7	5.7	BeCu	Au	0.60~2.20	
BCG-20X58X050	C	2	5.8	5	BeCu	Au	0.50~1.50	
BCG-20X60X040	C	2	6	4	BeCu	Au	NA	side contact
BCG-20X60X060	C	2	6	6	BeCu	Au	0.50~2.00	
BCG-25X30X040	C	2.5	3	4	BeCu	Au	0.30~1.20	
BCG-25X40X021	C	2.5	4	2.1	BeCu	Au	0.20~0.50	
BCG-25X40X050	C	2.5	4	5	BeCu	Au	0.25~1.50	
BCG-25X40X055	C	2.5	4	5.5	BeCu	Au	0.25~2.00	
BCG-25X40X060	C	2.5	4	6	BeCu	Au	1.00~2.00	
BCG-25X41X025	C	2.5	4.1	2.5	BeCu	Au	0.25~0.80	
BCG-25X43X035	C	2.5	4.3	3.5	BeCu	Au	0.30~1.00	
BCG-25X45X048	C	2.5	4.5	4.8	BeCu	Au	0.50~1.80	
BCG-25X50X054	C	2.5	5	5.4	BeCu	Au	0.50~2.00	
BCG-40X40X080	C	4	4	8	BeCu	Au	0.50~2.00	
BCS-30X66X070	C	3	6.6	7	BeCu	Tin	0.10~2.00	
BDG-25X60X058	D	2.5	6	5.8	BeCu	Au	NA	side contact
BDS-20X35X027	D	2	3.5	2.7	BeCu	Tin	NA	side contact
BSG-20X45X070	S	2	4.5	7	BeCu	Au	0.50~2.10	
BSG-25X65X080	S	2.5	6.5	8	BeCu	Au	0.50~2.40	
BSG-25X70X120	S	2.5	7	12	BeCu	Au	0.50~3.00	
BXG-25X35X040	X	2.5	3.5	4	BeCu	Au	0.60~1.50	
SDG-25X34X027	D	2.5	3.4	2.7	Stainless	Au	NA	side contact
TCG-15X27X020	C	1.5	2.7	2	TiCu	Au	0.20~0.50	
TCG-15X27X020(Z	C	1.5	2.7	2	TiCu	Au	0.20~0.50	

SMD Finger Character

Features:

1. Copper Beryllium is a high strength and high conductivity alloy.
2. The thermal and electrical conductivities of beryllium copper promote it used in fields required heat dissipation and current carrying capacity.
3. Copper Beryllium, high strength alloys, has less density than conventional special coppers.
4. Copper beryllium alloys are available in variety of product forms.

Physical Properties

Item	
Density -g/cm^3	8.36
Thermal Expansion Coefficient (20℃~200℃)-m/m/℃	9.7 x 10-6
Thermal Conductivity-cal/(cm.s.℃)	0.25
Melting Temperature-℃	870~980

Ref: www.brushwellman.com

Mechanical and Electrical Properties

Item	Before Treatment	After Treatment
Heat treatment		2hr 315℃
Tensile Strength-Kgf	67~70	141~152
Yielding Strength-Kgf	—	127~138
Elongation Percentage-%	21	3
Hardness-HV	176~216	410~435
Conductivity Percentage-IACS*	22~28	Good in Au plated

* IACS : international Annealed Copper Standard.

SMD Finger Benefits

1. Taping and reel package for SMT machine to make fast-speed produce and less labor power requirement.
2. Small size feature to match up handheld equipment application.
3. Metal electroplated make better contact reliability than FOF.
4. Resist for salt-spray and thermal shock test.

Compressing Impedance and Loading Force(1/2)

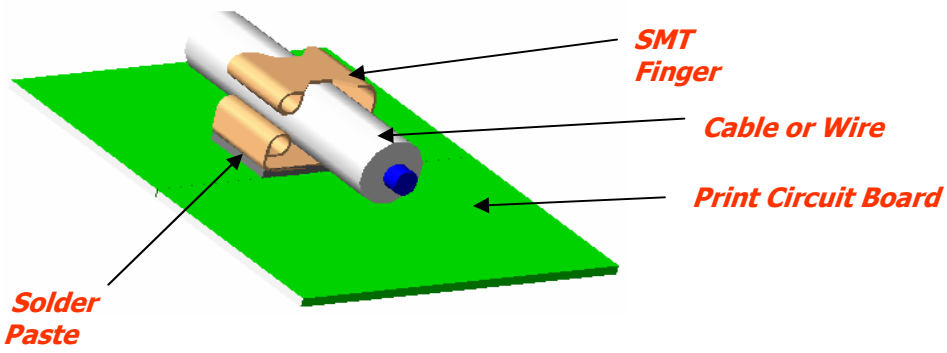
P/N	Compression Ratio(%)	Loading Force(g)	Impedance(Ω)
B3G-25x48x070	10	80	0.002
	30	241	0.001
B3G-25x70x090	10	29	0.017
	30	103	0.01
B3G-30x60x100	10	36	0.023
	30	144	0.011
B4G-25x40x054	10	154	0.1
	30	678	0.05
B5G-20x30x031	10	61	0.008
	30	164	0.006
B5G-20x70x062	10	48	0.013
	30	155	0.011
B5G-25x40x041	10	38	0.013
	30	85	0.009
B5G-25x45x060	10	43	0.007
	30	123	0.006
B5G-40x40x051	10	63	0.006
	30	190	0.004
B7G-25x40x050	10	135	0.005
	30	184	0.005
B8G-20x40x037	10	109	0.008
	30	310	0.006
B8G-20x45x045	10	65	0.01
	30	236	0.006
B8G-30x40x051	10	43	0.015
	30	422	0.005
BCG-15x27x015	10	26	0.221
	30	204	0.001
BCG-20x30x025	10	82	0.006
	30	294	0.004
BCG-20x30x040	10	140	0.003
	30	283	0.003
BCG-20x32x015	10	11	0.087
	30	89	0.007
BCG-20x35x031	10	61	0.008
	30	164	0.006
BCG-20x38x020	10	30	0.009
	30	151	0.005

Compressing Impedance and Loading Force(2/2)

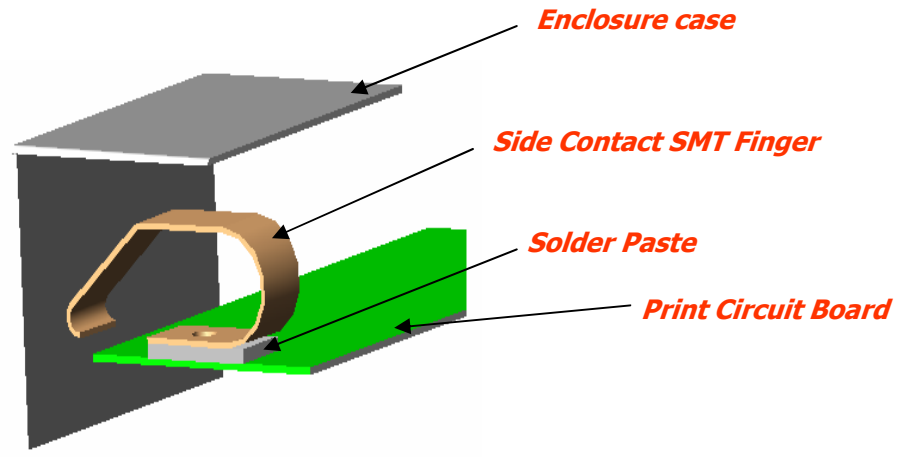
P/N	Compression Ratio(%)	Loading Force(g)	Impedance(Ω)
BCG-20x40x020	10	26	0.013
	30	133	0.007
BCG-20x40x053	10	82	0.008
	30	129	0.008
BCG-20x47x057	10	52	0.008
	30	81	0.008
BCG-20x58x050	10	199	0.006
	30	2022	0.004
BCG-20x60x040	10	923	0.004
	30	2290	0.003
BCG-20x60x060	10	22	0.013
	30	59	0.012
BCG-25x45x048	10	21	0.006
	30	194	0.004
BCG-25x30x040	10	148	0.005
	30	290	0.004
BCG-25x40x021	10	37	0.004
	30	190	0.003
BCG-25x40x050	10	63	0.007
	30	153	0.006
BCG-25x40x055	10	94	0.006
	30	139	0.006
BCG-25x40x060	10	99	131
	30	0.06	0.06
BCG-25x43x035	10	7	0.02
	30	110	0.1
BCG-25x50x054	10	606	0.007
	30	800	0.008
BSG-20x45x070	10	56	0.009
	30	218	0.006
BSG-25x65x080	10	85	0.007
	30	402	0.005
BSG-25x70x120	10	182	0.006
	30	561	0.005
BSG-25x70x130	10	212	0.006
	30	591	0.005
BXG-25x35x040	10	114	0.028
	30	294	0.015

SMD Finger application

- **ESD Grounding function**
  - **Notebook,PDA,Digital Still Camera…..etc.**
- **Wire Clipper funct**
  - **Notebook LCD pannel inverter line and embedded**
- **Antenna line fix application**
- **Side Contact function**
  - **Contact between Motherboard and case**
- **Slide Contact function**
  - **Notebook PCMCIA card or drawable disk drive contact**
- **Antenna Contact function**
  - **Mobile Phone Singal connect between motherboard and Antenna**

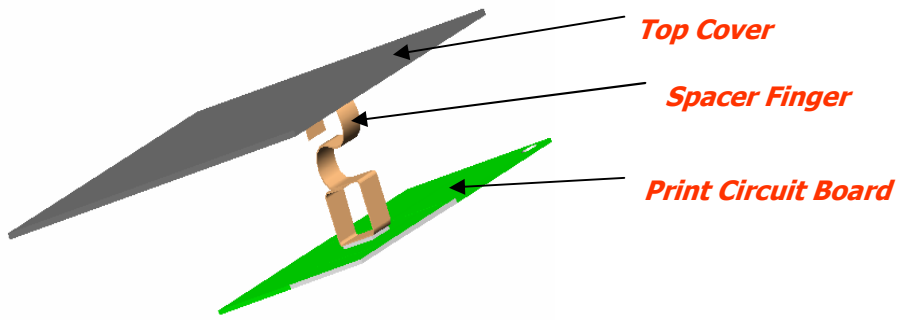


- ***more reliability than Kapton Tape or Acetate Tape.***
- ***less labor power than traditional design.***
- ***easy to rework and reuse.***

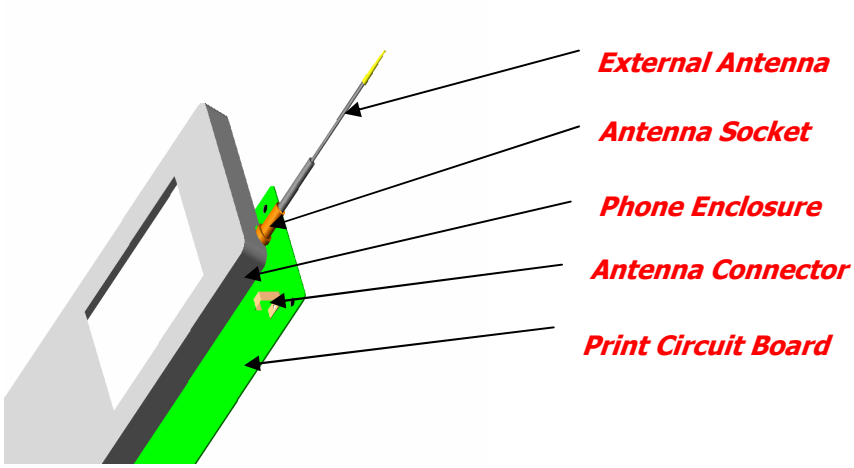


- ***more reliability than Gasket Foam***
- ***less space occupied than Gasket Foam***
- ***Applicated by handheld equipment***

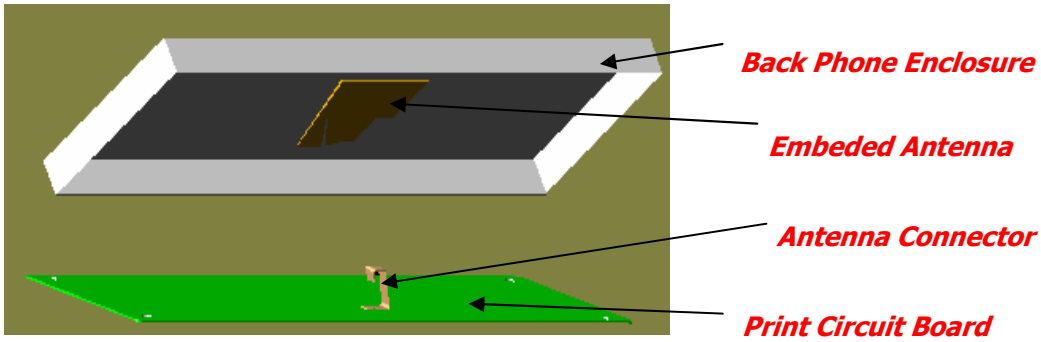
SMD Finger application



- *more reliability than Gasket Foam*
- *less space occupied than Gasket Foam*
- *easy to design for higher gap between PCB & Cover*
- *special design to protect from shape change*



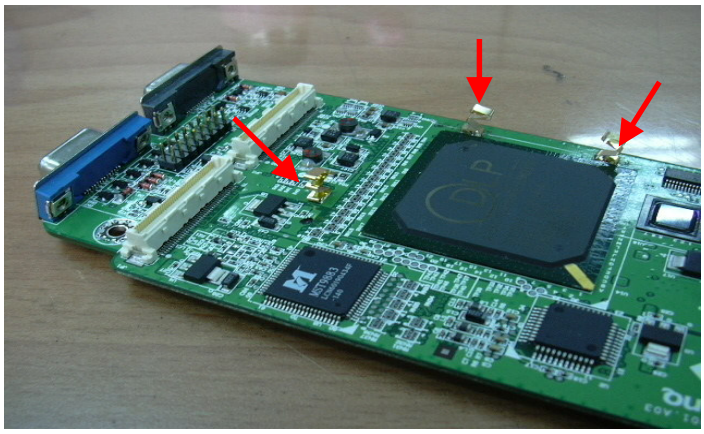
- *more flexiable for Antenna Contact*
- *Excellent for Singal Transfer between Antenna and PCB*



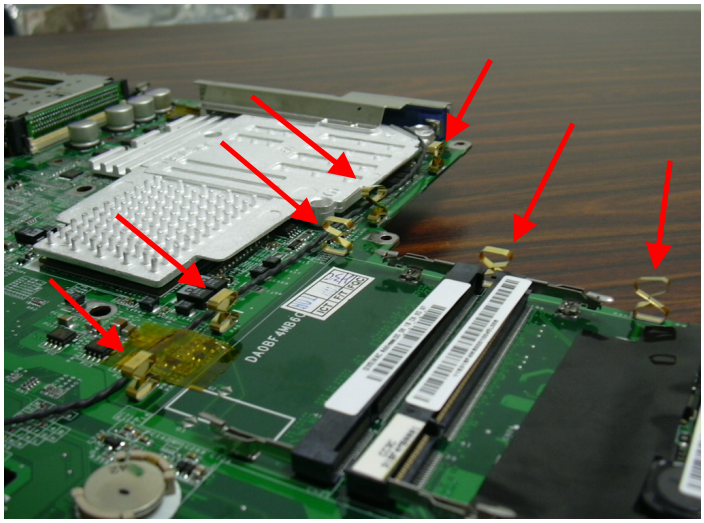
- *more flexiable for Antenna Contact*
- *Excellent for Singal Transfer between Antenna and PCB*

SMD Finger application-photo

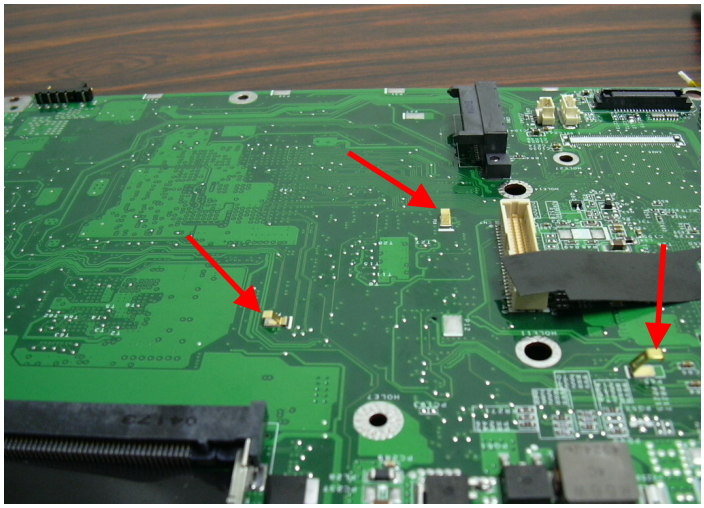
- Projector



- NoteBook



- NoteBook



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