Bendable build-up substrate : F-Babuls

*F-Babuls (Freely Bendable Advanced Build-up Substrate)

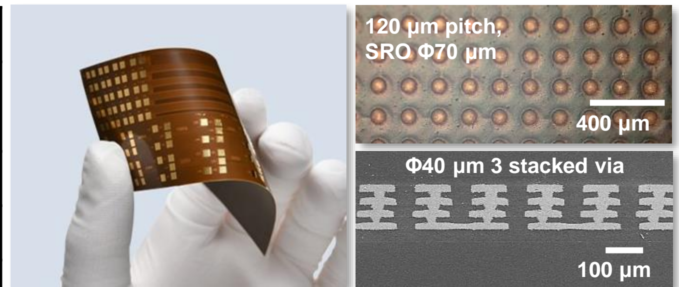
- under development -

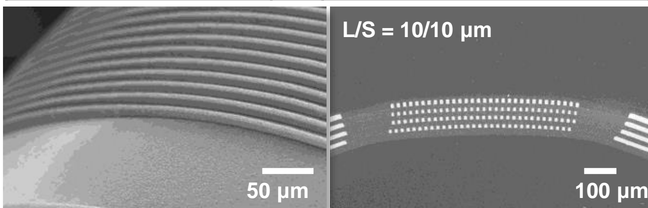
Features

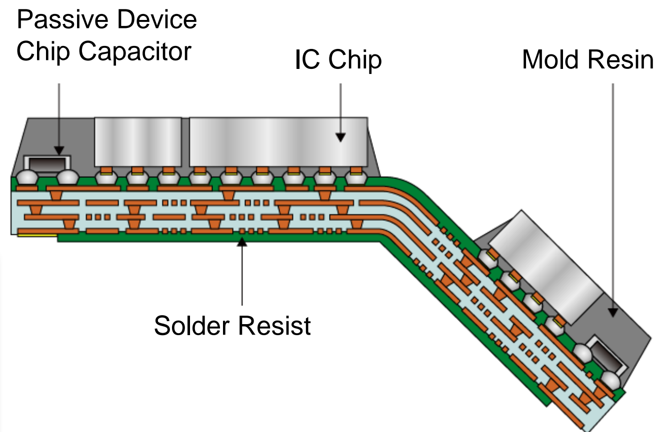
- High-density bendable substrate suitable for high-speed communication and large-volume information processing
- Capable of forming fine designs that enable the mounting of various LSIs, including CPUs and GPUs
- No adhesive is used between layers, preventing degradation of transmission characteristics and increase in layer thickness.
- Bendability and low profile enable installation along the device shape.

Structure

	Specifications	
Number of Layers	Up to 5 resin layers, 4 metal layers	
Trace Design	L/S = 10/10 μm	
	Via/Land = 40/90 μm	
Dielectric Thk.	25 ～ 75 μmt	
SRO	Min. Φ70 μm, 120 μm pitch	
Round Dia.	≦ 0.5 mm	
Bendable Material	A	For high transmission
	B	For high elongation





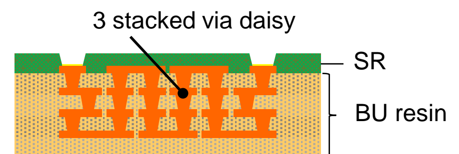


Reliability test

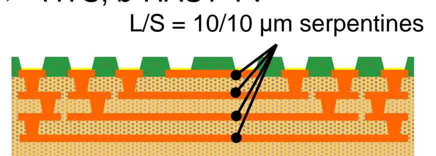
- Pre-con. : JEDEC Lv. 3A
- TS : -55 ⇔ 125 deg.C , 1000 cycles
- HTS: 150 deg.C, 1000 hr.
- b-HAST : 130 deg.C, 85 % RH, 3.5 V, 96 hr.
- Criteria : Change of resistance ±10 %

Reliability test	Design	Result
TS	Φ40 μm, 3 stacked via	Pass
HTS	L/S = 10/10 μm	Pass
b-HAST	L/S = 10/10 μm	Pass

➢ TS TV



➢ HTS, b-HAST TV



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