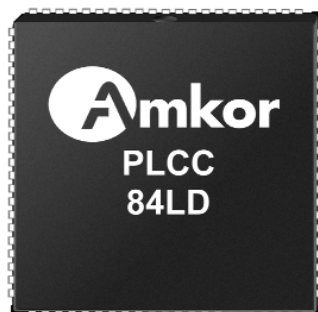




Plastic Leaded Chip Carrier (PLCC) Packages:

Amkor's PLCC offerings cover the total range offered by the industry. It includes all square body packages from 20 lead through 84 lead. Also included is the rectangular body format of the 32 lead. All PLCC products are offered with and without heatspreaders. The heatspreader versions are identical in form factor to the standard non-heatspreader versions. Both versions are JEDEC compliant in all respects. The heatspreader versions give the system designer greater latitude in thermally enhanced board level and/or system design. All products utilize the most advanced manufacturing equipment offered today. Lead free and green material set are qualified.

Applications:

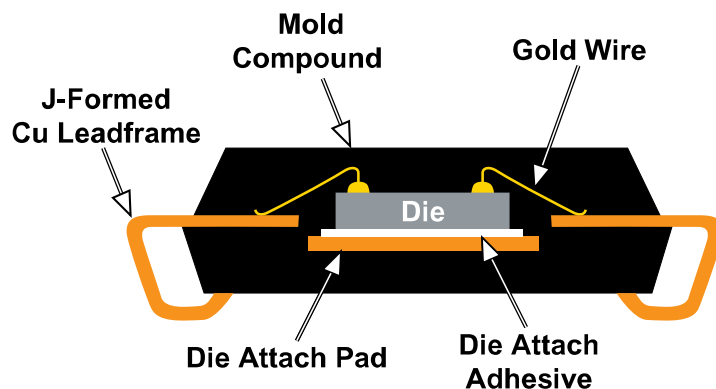
Amkor's PLCC product family was engineered to meet JEDEC requirements for "J" leaded surface mount packages. As such, they take up less board space than equivalent "gull" formed product in the same body size. Due to the flexibility and performance offered, most industry circuit types can be designed into this product. This would include memory, processors and controllers, ASIC, DSP, PC chipset, to name a few. Applications range from consumer through automotive and aerospace.

PLCC

Features:	Amkor’s PLCC IC package portfolio provides: • .352” x .352” to 1.152” x 1.152” body size • 20 to 84 lead counts • JEDEC standard compliant • Available with heatspreader option • Fine pitch wire bond capability						
Thermal Resistance:	Multi-Layer PCB						
	Theta JA (°C/W) by Velocity						
	Pkg	Body Size (mm)	Pad Size (mm)	0	200	500	
	44 ld	16.6 x 16.6	7.8 x 7.8	30.0	24.5	22.0	
	44 ld*	16.6 x 16.6	7.8 x 7.8	24.4	19.0	16.6	
	*With Drop-in heatspreader option			Tested @ 1W			
Electrical:							
	Pkg	Body Size (mm)	Pad Size (mm)	Lead	Self Inductance (nH)	Bulk Capacitance (pF)	Self Resistance (mΩ)
	20 ld	8.9 x 8.9	220 x 220	Longest	2.110	0.596	13.5
				Shortest	1.780	0.583	11.1
	Simulated Results @ 100 MHz						
Reliability:	Amkor’s PLCCs are reliability assured through optimized design, material and process enabling high performance operation of your IC chip.						
	Moisture sensitivity characterization		JEDEC Level 3 30 °C/60% - 192 hrs, SAT-192 hrs				
	PCT		121 °C, 2 atm, 100%RH, 504 hours				
	Temp cycle		-65/150 °C, 1000 cycles				
	Temp/Humidity		85 °C/85% RH, 1000 hours				
	High temp storage		150 °C, 1000 hours				

PLCC

Cross-section PLCC



Process Highlights

Die thickness (max)	25 mils
Strip solder plating	85/15 Sn/Pb or 100% Sn
Strip marking	Laser/pad/offset
Lead inspection	Optical
Pack/ship options	Bar code

Test Services

- Program/generation/conversion
- Product engineering
- Wafer sort
- 256 pin x 20 MHz test system available
- -55 °C to +165 °C test available
- Burn-in

Shipping

Clear antistatic tube 20 inches

Configuration Options:

PLCC NOMINAL PACKAGE DIMENSIONS

<u>Lead Count</u>	<u>Body Size</u>	<u>Body Thickness</u>	<u>Lead Pitch</u>	<u>Lead Form</u>	<u>Amkor Dwg No.</u>	<u>JEDEC Dwg No.</u>	<u>Qty Per Tube</u>
Square							
20	.352 x .352	0.152	0.05	N/A	00060	MS-018	46
28	.452 x .452	0.152	0.05	N/A	00060	MS-018	37
44	.652 x .652	0.152	0.05	N/A	00060	MS-018	26
52	.752 x .752	0.152	0.05	N/A	00060	MS-018	23
68	.952 x .952	0.150	0.05	N/A	00060	MS-018	18
84	1.152 x 1.152	0.150	0.05	N/A	00060	MS-018	15
Rectangular							
32	.452 x .552	0.109	0.05	N/A	00061	MS-016	30

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