



## Available Packing Methods and Quantities

Atmel provides four different packing methods to provide maximum protection for our product and to best suit our customer's needs: 1) Shipping Tubes, 2) Shipping Trays, 3) Unit Packing, and

4) Tape and Reel. These first three methods are our standard pack, but we also provide tape and reel upon customer request.

## Packing Methods and Quantities

### Shipping Tubes

- Material: Clear polyvinyl chloride
- ESD: Topically coated with anti-static solution

### Shipping Trays

- Conforms to JEDEC Thin Matrix Tray outlines
- Bakeable and Conductive

### Quantity per Tube/Tray

Package	Lead Count	Package Code	Quantity per Tube/Tray	Tubes/Trays per Bag
CBGA	24	C	160	10
	42	C	80	10
Cerdip (300 mil)	16	D3/DW3	24	40
	20	D3/DW3	19	40
	24	D3/DW3	15	40
Cerdip (600 mil)	24	D6/DW6	16	20
	28	D6/DW6	14	20
	32	D6/DW6	12	20
	40	D6/DW6	10	20
Flatpack	28	F	15	15
	32	F	15	15
LCC	20	L/LW	54	60
	28	L/LW	42	60
	32	L/LW	34	60
	44	L/LW	29	60
Plastic DIP (300 mil)	8	P3	50	40
	16	P3	24	40
	20	P3	18	40
	24	P3	15	40

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## Quantity per Tube/Tray (Continued)

Package	Lead Count	Package Code	Quantity per Tube/Tray	Tubes/Trays per Bag
Plastic DIP (600 mil)	24	P6	16	20
	28	P6	14	20
	32	P6	12	20
	40	P6	9	20
PLCC	20	J	48	60
	28	J	38	60
	32	J	32	60
	44	J	27	40
	68	J	18	15
	84	J	15	15
PQFP	44	Q	160	10
	100	Q	66	10
	160	Q	24	10
SOIC (150 mil)	8	S1	94	100
	16	S	45	100
SOIC (210 mil)	8	S2	94	100
SOIC (300 mil)	20	S	31	100
	24	S	31	100
	28	S	27	100
SOIC (330 mil)	28	R	26	100
	32	R	23	100
SSOP	20	Y	75	100
TQFP	32	A	250	10
	44	A	160	10
	48	A	250	10
	64	A	90	10
	100	A	90	10
TSOP	28	T	234	10
	32	T	156	10
	40	T	120	10
	48	T	96	10
TSSOP	14	T	96	100
	20	X	67	100
	24	X	200	10
$\mu$ BGA	45	U	260	10
VSOP	32	V	208	10
	40	V	160	10

## Unit Pack/Boxes

- In order to maximize protection, each unit is packed in specially designed carriers/boxes.

## Quantity per Unit Pack/Box

Package	Lead Count	Package Code	Method	Quantity
Pin Grid Array	28	U	Box	20
	30	U	Box	20

## Tape and Reel

- Meets or exceeds the requirements of EIA-481-x, Carrier Taping of SMC for Automated Handling
- Material: Carrier Tape = Black, conductive PVC or polystyrene
  - Cover Tape = Clear, anti-static polyester film
  - Reel = 13 inch diameter plastic reel; 7 inch diameter plastic reel used for 500 piece quantities
- Each reel is individually packed into its own box, with a bar code label attached to both the reel and box

## Quantity per Reel

Package	Lead Count	Package Code	Width	Pitch	Quantity
PLCC	28	J	24 mm	16 mm	750
	32	J	24 mm	16 mm	750
	44	J	32 mm	24 mm	500
SOIC (150 mil)	8	S1	12 mm	8 mm	Up to 3000 in 500 piece increments
	14	S	12 mm	8 mm	
SOIC (210 mil)	8	S2	16 mm	12 mm	Up to 2000 in 500 piece increments
SOIC (300 mil)	20	S	24 mm	12 mm	1000
	24	S	24 mm	12 mm	1000
	28	S	24 mm	12 mm	1000
SOIC (330 mil)	28	R	24 mm	16 mm	1000
TSOP	28	T	24 mm	12 mm	2000
	32	T	32 mm	16 mm	1500
	40	T	32 mm	16 mm	1250
TSSOP	20	X	16 mm	8 mm	4000
	24	X	16 mm	8 mm	4000



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