

PACKAGE INFORMATION - PIN COUNT/PACKAGE TYPE (Page 1 of 4)

| | | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q |
|----|-----|------------------|---------------|-------|-------|--------|------|---------------|-------------------|-------------------|------|------|--------|--------|---------------------|------|
| | | DFNE4 (3x3mm) | PLCC (LJP) | **QFP | *TQFP | *VTQFP | BGA | FBGA | VFBGE1 (4x4mm) | VFBGE1 (3x3mm) | SSOP | DSE1 | UFBGE1 | *STQFP | ***QFNE3 (4x4mm) | LBGA |
| A | 16 | AA | AB | AC | AD | AE | AF | AG | AH | AJ | AK | AL | AM | AN | AP | AQ |
| B | 20 | BA | BB | BC | BD | BE | BF | BG | BH | BJ | BK | BL | BM | BN | BP | BQ |
| C | 24 | CA | CB | CC | CD | CE | CF | CG | CH | CJ | CK | CL | CM | CN | CP | CQ |
| D | 28 | DA | DB | DC | DD | DE | DF | DG | DH | DJ | DK | DL | DM | DN | DP | DQ |
| E | 32 | EA | EB | EC | ED | EE | EF | EG | EH | EJ | EK | EL | EM | EN | EP | EQ |
| F | 40 | FA | FB | FC | FD | FE | FF | FG | FH | FJ | FK | FL | FM | FN | FP | FQ |
| G | 25 | GA | GB | GC | GD | GE | GF | GG | GH | GJ | GK | GL | GM | GN | GP | GQ |
| H | 48 | HA | HB | HC | HD | HE | HF | HG | HH | HJ | HK | HL | HM | HN | HP | HQ |
| J | 64 | JA | JB | JC | JD | JE | JF | JG | JH | JJ | JK | JL | JM | JN | JP | JQ |
| K | 12 | KA | KB | KC | KD | KE | KF | KG | KH | KJ | KK | KL | KM | KN | KP | KQ |
| L | 132 | LA | LB | LC | LD | LE | LF | LG | LH | LJ | LK | LL | LM | LN | LP | LQ |
| M | 100 | MA | MB | MC | MD | ME | MF | MG | MH | MJ | MK | ML | MM | MN | MP | MQ |
| N | 128 | NA | NB | NC | ND | NE | NF | NG | NH | NJ | NK | NL | NM | NN | NP | NQ |
| P | 144 | PA | PB | PC | PD | PE | PF | PG | PH | PJ | PK | PL | PM | PN | PP | PQ |
| Q | 160 | QA | QB | QC | QD | QE | QF | QG | QH | QJ | QK | QL | QM | QN | QP | QQ |
| R | 176 | RA | RB | RC | RD | RE | RF | RG | RH | RJ | RK | RL | RM | RN | RP | RQ |
| S | 208 | SA | SB | SC | SD | SE | SF | SG | SH | SJ | SK | SL | SM | SN | SP | SQ |
| T | 292 | TA | TB | TC | TD | TE | TF | TG | TH | TJ | TK | TL | TM | TN | TP | TQ |
| U | 324 | UA | UB | UC | UD | UE | UF | UG | UH | UJ | UK | UL | UM | UN | UP | UQ |
| V | 328 | VA | VB | VC | VD | VE | VF | VG | VH | VJ | VK | VL | VM | VN | VP | VQ |
| W | 420 | WA | WB | WC | WD | WE | WF | WG | WH | WJ | WK | WL | WM | WN | WP | WQ |
| X | 492 | XA | XB | XC | XD | XE | XF | XG | XH | XJ | XK | XL | XM | XN | XP | XQ |
| Y | 14 | YA | YB | YC | YD | YE | YF | YG | YH | YJ | YK | YL | YM | YN | YP | YQ |
| Z | 134 | ZA | ZB | ZC | ZD | ZE | ZF | ZG | ZH | ZJ | ZK | ZL | ZM | ZN | ZP | ZQ |
| AA | 256 | AAA | AAB | AAC | AAD | AAE | AAF | AAG | AAH | AAJ | AAK | AAL | AAM | AAN | AAP | AAQ |
| AB | 56 | ABA | ABB | ABC | ABD | ABE | ABF | ABG | ABH | ABJ | ABK | ABL | ABM | ABN | ABP | ABQ |
| AC | 8 | ACA | ACB | ACC | ACD | ACE | ACF | ACG | ACH | ACJ | ACK | ACL | ACM | ACN | ACP | ACQ |
| AD | 80 | ADA | ADB | ADC | ADD | ADE | ADF | ADG | ADH | ADJ | ADK | ADL | ADM | ADN | ADP | ADQ |
| AE | 36 | AEA | AEB | AEC | AED | AEE | AEF | AEG | AEH | A EJ | AEK | AEL | AEM | AEN | AEP | AEQ |
| AF | 6 | AFA | AFB | AFC | AFD | AFE | AF F | AFG | AFH | AFJ | AFK | AFL | AFM | AFN | AFP | AFQ |
| AG | 5 | AGA | AGB | AGC | AGD | AGE | AGF | AGG | AGH | AGJ | AGK | AGL | AGM | AGN | AGP | AGQ |
| AH | 124 | AHA | AHB | AHC | AHD | AHE | AHF | AHG | AHH | AHJ | AHK | AHL | AHM | AHN | AHP | AHQ |
| AI | 10 | AIA | AIB | AIC | AID | AIE | AIF | AIG | AIH | AIJ | AIK | AIL | AIM | AIN | AIP | AIQ |
| AJ | 156 | AJA | AJB | AJC | AJD | AJE | AJF | AJG | AJH | AJJ | AJK | AJL | AJM | AJN | AJP | AJQ |

Orange highlighted package designations are currently qualified at SMSC

KEY FOR 2-DIGIT CODE
 1st Letter = Pin Count
 2nd Letter = Package Type

KEY FOR 3-DIGIT CODE (If 2nd letter is A or B, then:)
 1st & 2nd Letter = Pin Count
 3rd Letter = Package Type

KEY FOR 3-DIGIT CODE (If 2nd letter is Z, then)
 1st Letter = Pin Count
 2nd & 3rd Letter = Package Type

KEY FOR 4-DIGIT CODE
 1st & 2nd Letter = Pin Count
 3rd & 4th Letter = Package Type

Part Number to be used for Part Marking and Ordering = Base Part Number - 2 (or 3) Digit Code

Examples:

USB97CFDC-MN = USB97CFDC in 100 STQFP package

LPC47N253-AAQ = LPC47N253 in 256 LBGA package

| *Note 1: | | |
|--------------|---------------------|---|
| Package Type | Thickness (Nominal) | Body Size (Nominal) - varies depending on Pin Count |
| TQFP | 1.4mm | Current Range: 7.0 x 7.0 mm to 28.0 x 28.0 mm |
| VTQFP | 1.0mm | Current Range: 14.0 x 14.0 mm to 20.0 x 20.0 mm |
| STQFP | 1.4mm | Current Range: 12.0 x 12.0 mm |

| **Note 2: | |
|--------------|-----------|
| Package Type | Footprint |
| MQFP | 3.2mm |
| QFP | 3.9mm |

Exceptions

LPC47M192-NC, LPC47M112-MC will not have MR or NR code.

Due to space limitations on 8-pin QFNN packages, AEZG was shrunk to only ZG for top marking purposes.

EMC2710P-ABZS will not have ABZJ code.

| ***Note 3: | |
|------------------------------------|-----------------------------|
| New Lead-Free Package Designations | |
| QE3: Lead Free QFP Pkg. | STQE3: Lead Free STQFP Pkg. |
| TQE3: Lead Free TQFP Pkg. | MQE3: Lead Free MQFP Pkg. |
| VTQE3: Lead Free VTQFP Pkg. | LBGE3: Lead Free LBGA Pkg |
| PLE3: Lead Free PLCC Pkg | SSOE3: Lead Free SSOP pkg |
| QFNE3: Lead Free QFN Pkg. | LFBGE3: Lead free LFBGA |
| SOTE3: Lead Free SOT pkg | SOIE3: Lead Free SOIC pkg |
| DQFNE3: Lead Free DQFN pkg | TSSOE3: Lead Free TSSON pkg |

PACKAGE INFORMATION - PIN COUNT/PACKAGE TYPE (Page 2 of 4)

| | | R | S | T | U | V | W | X | Y | Z | ZA | ZB | ZC | ZD | ZE |
|----|-----|--------|--------|---------|----------|----------|---------|----------------|----------------|---------------------|----------|-----------------|----------|---------|----------------|
| | | **MQFP | ***QE3 | ***TQE3 | ***VTQE3 | ***STQE3 | ***MQE3 | QFN (5x5mm) | QFN (6x6mm) | ***QFNE3 (3x3mm) | ***LBGE1 | TSSOP / MSOP | ***SSOE3 | ***PLE3 | QFN (7x7mm) |
| A | 16 | AR | AS | AT | AU | AV | AW | AX | AY | AZ | AZA | AZB | AZC | AZD | AZE |
| B | 20 | BR | BS | BT | BU | BV | BW | BX | BY | BZ | BZA | BZB | BZC | BZD | BZE |
| C | 24 | CR | CS | CT | CU | CV | CW | CX | CY | CZ | CZA | CZB | CZC | CZD | CZE |
| D | 28 | DR | DS | DT | DU | DV | DW | DX | DY | DZ | DZA | DZB | DZC | DZD | DZE |
| E | 32 | ER | ES | ET | EU | EV | EW | EX | EY | EZ | EZA | EZB | EZC | EZD | EZE |
| F | 40 | FR | FS | FT | FU | FV | FW | FX | FY | FZ | FZA | FZB | FZC | FZD | FZE |
| G | 25 | GR | GS | GT | GU | GV | GW | GX | GY | GZ | GZA | GZB | GZC | GZD | GZE |
| H | 48 | HR | HS | HT | HU | HV | HW | HX | HY | HZ | HZA | HZB | HZC | HZD | HZE |
| J | 64 | JR | JS | JT | JU | JV | JW | JX | JY | JZ | JZA | JZB | JZC | JZD | JZE |
| K | 12 | KR | KS | KT | KU | KV | KW | KX | KY | KZ | KZA | KZB | KZC | KZD | KZE |
| L | 132 | LR | LS | LT | LU | LV | LW | LX | LY | LZ | LZA | LZB | LZC | LZD | LZE |
| M | 100 | MR | MS | MT | MU | MV | MW | MX | MY | MZ | MZA | MZB | MZC | MZD | MZE |
| N | 128 | NR | NS | NT | NU | NV | NW | NX | NY | NZ | NZA | NZB | NZC | NZD | NZE |
| P | 144 | PR | PS | PT | PU | PV | PW | PX | PY | PZ | PZA | PZB | PZC | PZD | PZE |
| Q | 160 | QR | QS | QT | QU | QV | QW | QX | QY | QZ | QZA | QZB | QZC | QZD | QZE |
| R | 176 | RR | RS | RT | RU | RV | RW | RX | RY | RZ | RZA | RZB | RZC | RZD | RZE |
| S | 208 | SR | SS | ST | SU | SV | SW | SX | SY | SZ | SZA | SZB | SZC | SZD | SZE |
| T | 292 | TR | TS | TT | TU | TV | TW | TX | TY | TZ | TZA | TZB | TZC | TZD | TZE |
| U | 324 | UR | US | UT | UU | UV | UW | UX | UY | UZ | UZA | UZB | UZC | UZD | UZE |
| V | 328 | VR | VS | VT | VU | VV | VW | VX | VY | VZ | VZA | VZB | VZC | VZD | VZE |
| W | 420 | WR | WS | WT | WU | WV | WW | WX | WY | WZ | WZA | WZB | WZC | WZD | WZE |
| X | 492 | XR | XS | XT | XU | XV | XW | XX | XY | XZ | XZA | XZB | XZC | XZD | XZE |
| Y | 14 | YR | YS | YT | YU | YV | YW | YX | YY | YZ | YZA | YZB | YZC | YZD | YZE |
| Z | 134 | ZR | ZS | ZT | ZU | ZV | ZW | ZX | ZY | ZZ | ZZA | ZZB | ZZC | ZZD | ZZE |
| AA | 256 | AAR | AAS | AAT | AAU | AAV | AAW | AAX | AAZ | AAZ | AAZA | AAZB | AAZC | AAZD | AAZE |
| AB | 56 | ABR | ABS | ABT | ABU | ABV | ABW | ABX | ABY | ABZ | ABZA | ABZB | ABZC | ABZD | ABZE |
| AC | 8 | ACR | ACS | ACT | ACU | ACV | ACW | ACX | ACY | ACZ | ACZA | ACZB | ACZC | ACZD | ACZE |
| AD | 80 | ADR | ADS | ADT | ADU | ADV | ADW | ADX | ADY | ADZ | ADZA | ADZB | ADZC | ADZD | ADZE |
| AE | 36 | AER | AES | AET | AEU | AEV | AEW | AEX | AEY | AEZ | AEZA | AEZB | AEZC | AEZD | AEZE |
| AF | 6 | AFR | AFS | AFT | AFU | AFV | AFW | AFX | AFY | AFZ | AFZA | AFZB | AFZC | AFZD | AFZE |
| AG | 5 | AGR | AGS | AGT | AGU | AGV | AGW | AGX | AGY | AGZ | AGZA | AGZB | AGZC | AGZD | AGZE |
| AH | 124 | AHR | AHS | AHT | AHU | AHV | AHW | AHX | AHY | AHZ | AHZA | AHZB | AHZC | AHZD | AHZE |
| AI | 10 | AIR | AIS | AIT | AIU | AIV | AIW | AIX | AIY | AIZ | AIZA | AIZB | AIZC | AIZD | AIZE |
| AJ | 156 | AJR | AJS | AJT | AJU | AJV | AJW | AJX | AJY | AJZ | AJZA | AJZB | AJZC | AJZD | AJZE |

PACKAGE INFORMATION - PIN COUNT/PACKAGE TYPE (Page 3 of 4)

| | | ZF | ZG | ZH | ZJ | ZK | ZL | ZM | ZN | ZP | ZQ | ZR | ZS | ZT |
|----|-----|----------------|---------------------|---------------------|------------------|---------------------|-----------|------|------|-----------|----------|------|----------------------------------|----------|
| | | QFN (8x8mm) | ***QFNE3 (6x6mm) | ***QFNE3 (7x7mm) | QFNE3 (8x8mm) | ***QFNE3 (5x5mm) | ***TSSOE3 | SOT | SIP | ***LFBGE1 | ***SOTE3 | DQFN | ***DQFNE3 (10x10, 12x12mm) | ***SOIE3 |
| A | 16 | AZF | AZG | AZH | AZJ | AZK | AZL | AZM | AZN | AZP | AZQ | AZR | AZS | AZT |
| B | 20 | BZF | BZG | BZH | BZJ | BZK | BZL | BZM | BZN | BZP | BZQ | BZR | BZS | BZT |
| C | 24 | CZF | CZG | CZH | CZJ | CZK | CZL | CZM | CZN | CZP | CZQ | CZR | CZS | CZT |
| D | 28 | DZF | DZG | DZH | DZJ | DZK | DZL | DZM | DZN | DZP | DZQ | DZR | DZS | DZT |
| E | 32 | EZF | EZG | EZH | EZJ | EZK | EZL | EZM | EZN | EZP | EZQ | EZR | EZS | EZT |
| F | 40 | FZF | FZG | FZH | FZJ | FZK | FZL | FZM | FZN | FZP | FZQ | FZR | FZS | FZT |
| G | 25 | GZF | GZG | GZH | GZJ | GZK | GZL | GZM | GZN | GZP | GZQ | GZR | GZS | GZT |
| H | 48 | HZF | HZG | HZH | HZJ | HZK | HZL | HZM | HZN | HZP | HZQ | HZR | HZS | HZT |
| J | 64 | JZF | JZG | JZH | JZJ | JZK | JZL | JZM | JZN | JZP | JZQ | JZR | JZS | JZT |
| K | 12 | KZF | KZG | KZH | KZJ | KZK | KZL | KZM | KZN | KZP | KZQ | KZR | KZS | KZT |
| L | 132 | LZF | LZG | LZH | LZJ | LZK | LZL | LZM | LZN | LZP | LZQ | LZR | LZS | LZT |
| M | 100 | MZF | MZG | MZH | MZJ | MZK | MZL | MZM | MZN | MZP | MZQ | MZR | MZS | MZT |
| N | 128 | NZF | NZG | NZH | NZJ | NZK | NZL | NZM | NZN | NZP | NZQ | NZR | NZS | NZT |
| P | 144 | PZF | PZG | PZH | PZJ | PZK | PZL | PZM | PZN | PZP | PZQ | PZR | PZS | PZT |
| Q | 160 | QZF | QZG | QZH | QZJ | QZK | QZL | QZM | QZN | QZP | QZQ | QZR | QZS | QZT |
| R | 176 | RZF | RZG | RZH | RZJ | RZK | RZL | RZM | RZN | RZP | RZQ | RZR | RZS | RZT |
| S | 208 | SZF | SZG | SZH | SZJ | SZK | SZL | SZM | SZN | SZP | SZQ | SZR | SZS | SZT |
| T | 292 | TZF | TZG | TZH | TZJ | TZK | TZL | TZM | TZN | TZP | TZQ | TZR | TZS | TZT |
| U | 324 | UZF | UZG | UZH | UZJ | UZK | UZL | UZM | UZN | UZP | UZQ | UZR | UZS | UZT |
| V | 328 | VZF | VZG | VZH | VZJ | VZK | VZL | VZM | VZN | VZP | VZQ | VZR | VZS | VZT |
| W | 420 | WZF | WZG | WZH | WZJ | WZK | WZL | WZM | WZN | WZP | WZQ | WZR | WZS | WZT |
| X | 492 | XZF | XZG | XZH | XZJ | XZK | XZL | XZM | XZN | XZP | XZQ | XZR | XZS | XZT |
| Y | 14 | YZF | YZG | YZH | YZJ | YZK | YZL | YZM | YZN | YZP | YZQ | YZR | YZS | YZT |
| Z | 134 | ZZF | ZZG | ZZH | ZZJ | ZZK | ZZL | ZZM | ZZN | ZZP | ZZQ | ZZR | ZZS | ZZT |
| AA | 256 | AAZF | AAZG | AAZH | AAZJ | AAZK | AAZL | AAZM | AAZN | AAZP | AAZQ | AAZR | AAZS | AAZT |
| AB | 56 | ABZF | ABZG | ABZH | ABZJ | ABZK | ABZL | ABZM | ABZN | ABZP | ABZQ | ABZR | ABZS | ABZT |
| AC | 8 | ACZF | ACZG | ACZH | ACZJ | ACZK | ACZL | ACZM | ACZN | ACZP | ACZQ | ACZR | ACZS | ACZT |
| AD | 80 | ADZF | ADZG | ADZH | ADZJ | ADZK | ADZL | ADZM | ADZN | ADZP | ADZQ | ADZR | ADZS | ADZT |
| AE | 36 | AEZF | AEZG | AEZH | AEZJ | AEZK | AEZL | AEZM | AEZN | AEZP | AEZQ | AEZR | AEZS | AEZT |
| AF | 6 | AFZF | AFZG | AFZH | AFZJ | AFZK | AFZL | AFZM | AFZN | AFZP | AFZQ | AFZR | AFZS | AFZT |
| AG | 5 | AGZF | AGZG | AGZH | AGZJ | AGZK | AGZL | AGZM | AGZN | AGZP | AGZQ | AGZR | AGZS | AGZT |
| AH | 124 | AHZF | AHZG | AHZH | AHZJ | AHZK | AHZL | AHZM | AHZN | AHZP | AHZQ | AHZR | AHZS | AHZT |
| AI | 10 | AIZF | AIZG | AIZH | AIZJ | AIZK | AIZL | AIZM | AIZN | AIZP | AIZQ | AIZR | AIZS | AIZT |
| AJ | 156 | AJZF | AJZG | AJZH | AJZJ | AJZK | AJZL | AJZM | AJZN | AJZP | AJZQ | AJZR | AJZS | AJZT |

PACKAGE INFORMATION - PIN COUNT/PACKAGE TYPE (Page 4 of 4)

| | | ZU | ZV | ZW | ZX | ZY |
|----|-----|------|--------|-------|---------------------|------------------------|
| | | BGE1 | TFBGE1 | XTQE3 | ***QFNE3 (9x9mm) | ***DQFNE3 (11x11mm) |
| A | 16 | AZU | AZV | AZW | AZX | AZY |
| B | 20 | BZU | BZV | BZW | BZX | BZY |
| C | 24 | CZU | CZV | CZW | CZX | CZY |
| D | 28 | DZU | DZV | DZW | DZX | DZY |
| E | 32 | EZU | EZV | EZW | EZX | EZY |
| F | 40 | FZU | FZV | FZW | FZX | FZY |
| G | 25 | GZU | GZV | GZW | GZX | GZY |
| H | 48 | HZU | HZV | HZW | HZX | HZY |
| J | 64 | JZU | JZV | JZW | JZX | JZY |
| K | 12 | KZU | KZV | KZW | KZX | KZY |
| L | 132 | LZU | LZV | LZW | LZX | LZY |
| M | 100 | MZU | MZV | MZW | MZX | MZY |
| N | 128 | NZU | NZV | NZW | NZX | NZY |
| P | 144 | PZU | PZV | PZW | PZX | PZY |
| Q | 160 | QZU | QZV | QZW | QZX | QZY |
| R | 176 | RZU | RZV | RZW | RZX | RZY |
| S | 208 | SZU | SZV | SZW | SZX | SZY |
| T | 292 | TZU | TZV | TZW | TZX | TZY |
| U | 324 | UZU | UZV | UZW | UZX | UZY |
| V | 328 | VZU | VZV | VZW | VZX | VZY |
| W | 420 | WZU | WZV | WZW | WZX | WZY |
| X | 492 | XZU | XZV | XZW | XZX | XZY |
| Y | 14 | YZU | YZV | YZW | YZX | YZY |
| Z | 134 | ZZU | ZZV | ZZW | ZZX | ZZY |
| AA | 256 | AAZU | AAZV | AAZW | AAZX | AAZY |
| AB | 56 | ABZU | ABZV | ABZW | ABZX | ABZY |
| AC | 8 | ACZU | ACZV | ACZW | ACZX | ACZY |
| AD | 80 | ADZU | ADZV | ADZW | ADZX | ADZY |
| AE | 36 | AEZU | AEZV | AEZW | AEZX | AEZY |
| AF | 6 | AFZU | AFZV | AFZW | AFZX | AFZY |
| AG | 5 | AGZU | AGZV | AGZW | AGZX | AGZY |
| AH | 124 | AHZU | AHZV | AHZW | AHZX | AHZY |
| AI | 10 | AIZU | AIZV | AIZW | AIZX | AIZY |
| AJ | 156 | AJZU | AJZV | AJZW | AJZX | AJZY |