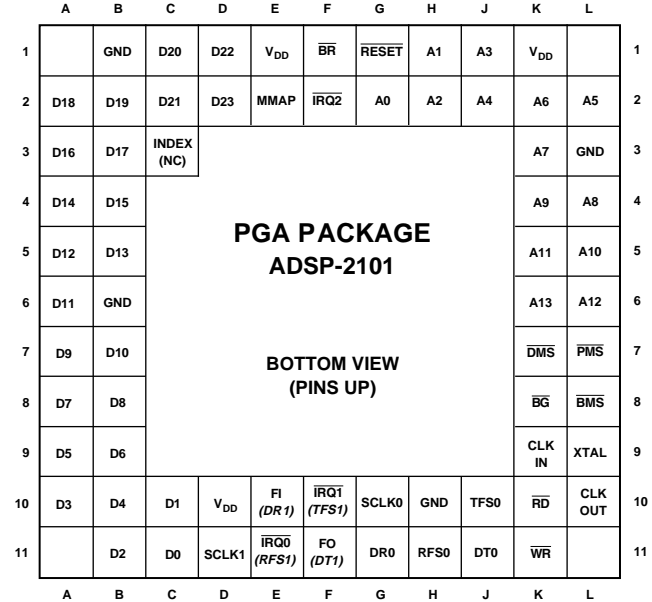
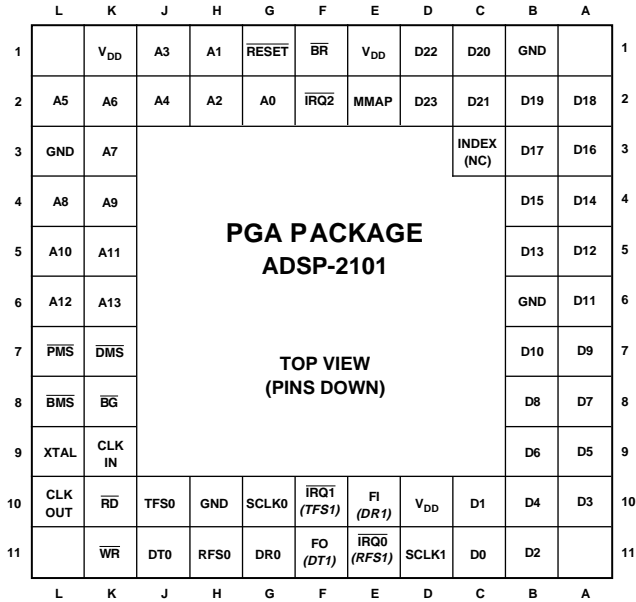


PIN CONFIGURATIONS

68-Pin PGA



NC = NO CONNECT

| PGA Number | Pin Name    |
|------------|-------------|
| K11        | WR          |
| K10        | RD          |
| J11        | DT0         |
| J10        | TFS0        |
| H11        | RFS0        |
| H10        | GND         |
| G11        | DR0         |
| G10        | SCLK0       |
| F11        | FO (DT1)    |
| F10        | IRQ1 (TFS1) |
| E11        | IRQ0 (RFS1) |
| E10        | FI (DR1)    |
| D11        | SCLK1       |
| D10        | VDD         |
| C11        | D0          |
| C10        | D1          |
| B11        | D2          |

| PGA Number | Pin Name |
|------------|----------|
| A10        | D3       |
| B10        | D4       |
| A9         | D5       |
| B9         | D6       |
| A8         | D7       |
| B8         | D8       |
| A7         | D9       |
| B7         | D10      |
| A6         | D11      |
| B6         | GND      |
| A5         | D12      |
| B5         | D13      |
| A4         | D14      |
| B4         | D15      |
| A3         | D16      |
| B3         | D17      |
| A2         | D18      |

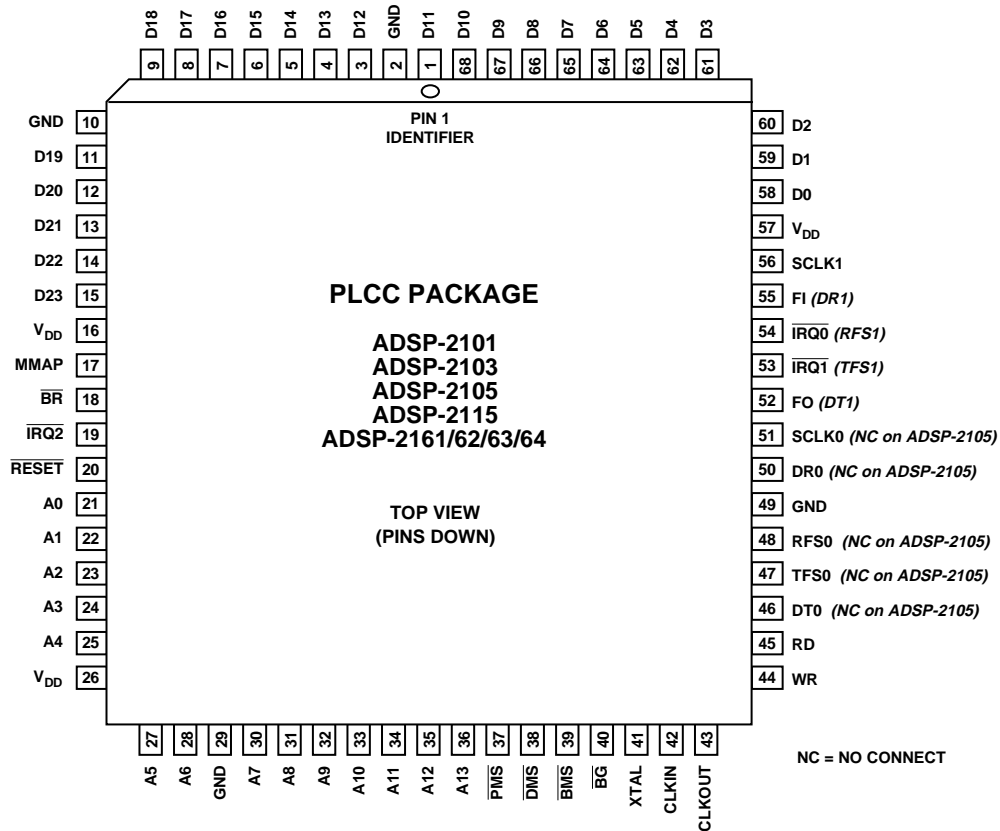
| PGA Number | Pin Name |
|------------|----------|
| B1         | GND      |
| B2         | D19      |
| C1         | D20      |
| C2         | D21      |
| D1         | D22      |
| D2         | D23      |
| E1         | VDD      |
| E2         | MMAP     |
| F1         | BR       |
| F2         | RESET    |
| G1         | A0       |
| G2         | A1       |
| H1         | A2       |
| H2         | A3       |
| J1         | A4       |
| J2         | A5       |
| K1         | VDD      |

| PGA Number | Pin Name   |
|------------|------------|
| L2         | A5         |
| K2         | A6         |
| L3         | GND        |
| K3         | A7         |
| L4         | A8         |
| K4         | A9         |
| L5         | A10        |
| K5         | A11        |
| L6         | A12        |
| K6         | A13        |
| L7         | PMS        |
| K7         | DMS        |
| L8         | BMS        |
| K8         | BG         |
| L9         | XTAL       |
| K9         | CLKIN      |
| L10        | CLKOUT     |
| C3         | Index (NC) |

# ADSP-21xx

## PIN CONFIGURATIONS

### 68-Lead PLCC



| PLCC Number | Pin Name        |
|-------------|-----------------|
| 1           | D11             |
| 2           | GND             |
| 3           | D12             |
| 4           | D13             |
| 5           | D14             |
| 6           | D15             |
| 7           | D16             |
| 8           | D17             |
| 9           | D18             |
| 10          | GND             |
| 11          | D19             |
| 12          | D20             |
| 13          | D21             |
| 14          | D22             |
| 15          | D23             |
| 16          | V <sub>DD</sub> |
| 17          | MMAP            |

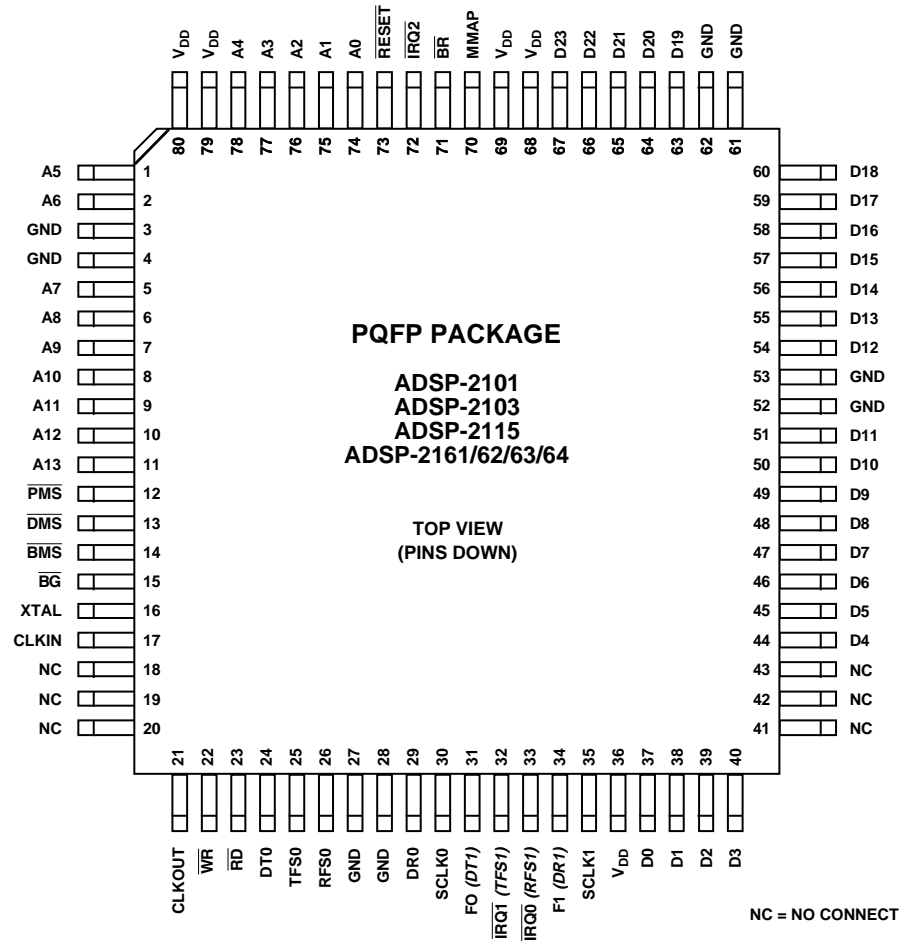
| PLCC Number | Pin Name          |
|-------------|-------------------|
| 18          | $\overline{BR}$   |
| 19          | $\overline{IRQ2}$ |
| 20          | RESET             |
| 21          | A0                |
| 22          | A1                |
| 23          | A2                |
| 24          | A3                |
| 25          | A4                |
| 26          | V <sub>DD</sub>   |
| 27          | A5                |
| 28          | A6                |
| 29          | GND               |
| 30          | A7                |
| 31          | A8                |
| 32          | A9                |
| 33          | A10               |
| 34          | A11               |

| PLCC Number | Pin Name                |
|-------------|-------------------------|
| 35          | A12                     |
| 36          | A13                     |
| 37          | PMS                     |
| 38          | $\overline{DMS}$        |
| 39          | $\overline{BMS}$        |
| 40          | BG                      |
| 41          | XTAL                    |
| 42          | CLKIN                   |
| 43          | CLKOUT                  |
| 44          | $\overline{WR}$         |
| 45          | RD                      |
| 46          | DT0 (NC on ADSP-2105)   |
| 47          | TFS0 (NC on ADSP-2105)  |
| 48          | RFS0 (NC on ADSP-2105)  |
| 49          | GND                     |
| 50          | DR0 (NC on ADSP-2105)   |
| 51          | SCLK0 (NC on ADSP-2105) |

| PLCC Number | Pin Name                 |
|-------------|--------------------------|
| 52          | FO (DT1)                 |
| 53          | $\overline{IRQ1}$ (TFS1) |
| 54          | $\overline{IRQ0}$ (RFS1) |
| 55          | FI (DR1)                 |
| 56          | SCLK1                    |
| 57          | V <sub>DD</sub>          |
| 58          | D0                       |
| 59          | D1                       |
| 60          | D2                       |
| 61          | D3                       |
| 62          | D4                       |
| 63          | D5                       |
| 64          | D6                       |
| 65          | D7                       |
| 66          | D8                       |
| 67          | D9                       |
| 68          | D10                      |

PIN CONFIGURATIONS

80-Lead PQFP  
80-Lead TQFP



| PQFP/<br>TQFP<br>Number | Pin<br>Name |
|-------------------------|-------------|
| 1                       | A5          |
| 2                       | A6          |
| 3                       | GND         |
| 4                       | GND         |
| 5                       | A7          |
| 6                       | A8          |
| 7                       | A9          |
| 8                       | A10         |
| 9                       | A11         |
| 10                      | A12         |
| 11                      | A13         |
| 12                      | PMS         |
| 13                      | DMS         |
| 14                      | BMS         |
| 15                      | BG          |
| 16                      | XTAL        |
| 17                      | CLKIN       |
| 18                      | NC          |
| 19                      | NC          |
| 20                      | NC          |

| PQFP/<br>TQFP<br>Number | Pin<br>Name     |
|-------------------------|-----------------|
| 21                      | CLKOUT          |
| 22                      | WR              |
| 23                      | RD              |
| 24                      | DT0             |
| 25                      | TFS0            |
| 26                      | RFS0            |
| 27                      | GND             |
| 28                      | GND             |
| 29                      | DR0             |
| 30                      | SCLK0           |
| 31                      | FO (DT1)        |
| 32                      | IRQ1 (TFS1)     |
| 33                      | IRQ0 (RFS1)     |
| 34                      | F1 (DR1)        |
| 35                      | SCLK1           |
| 36                      | V <sub>DD</sub> |
| 37                      | D0              |
| 38                      | D1              |
| 39                      | D2              |
| 40                      | D3              |

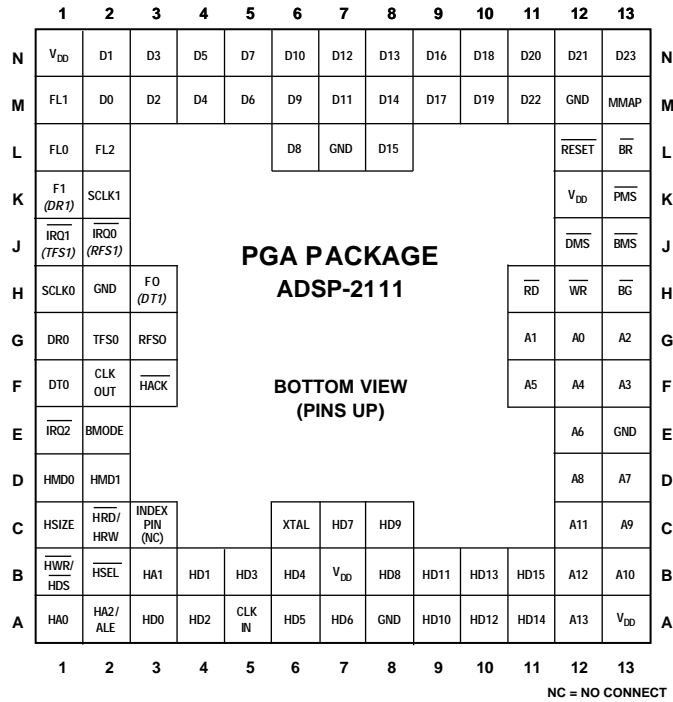
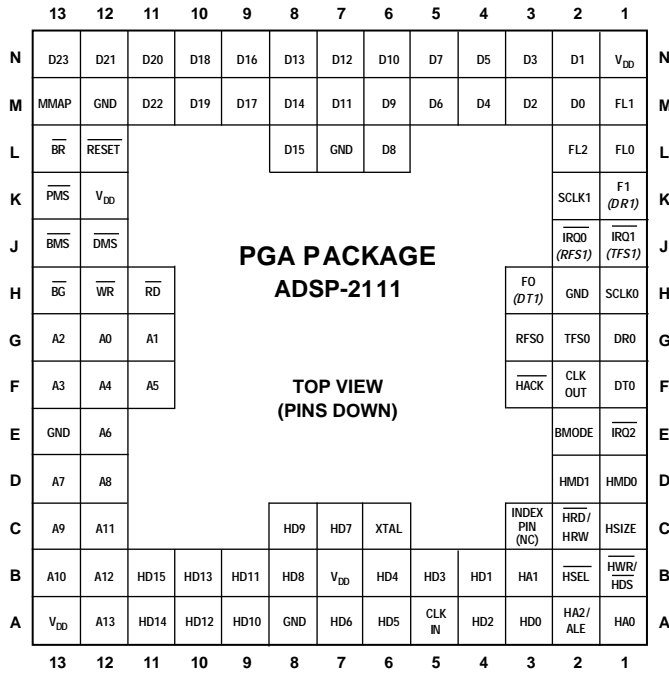
| PQFP/<br>TQFP<br>Number | Pin<br>Name |
|-------------------------|-------------|
| 41                      | NC          |
| 42                      | NC          |
| 43                      | NC          |
| 44                      | D4          |
| 45                      | D5          |
| 46                      | D6          |
| 47                      | D7          |
| 48                      | D8          |
| 49                      | D9          |
| 50                      | D10         |
| 51                      | D11         |
| 52                      | GND         |
| 53                      | GND         |
| 54                      | D12         |
| 55                      | D13         |
| 56                      | D14         |
| 57                      | D15         |
| 58                      | D16         |
| 59                      | D17         |
| 60                      | D18         |

| PQFP/<br>TQFP<br>Number | Pin<br>Name     |
|-------------------------|-----------------|
| 61                      | GND             |
| 62                      | GND             |
| 63                      | D19             |
| 64                      | D20             |
| 65                      | D21             |
| 66                      | D22             |
| 67                      | D23             |
| 68                      | V <sub>DD</sub> |
| 69                      | V <sub>DD</sub> |
| 70                      | MMAP            |
| 71                      | BR              |
| 72                      | IRQ2            |
| 73                      | RESET           |
| 74                      | A0              |
| 75                      | A1              |
| 76                      | A2              |
| 77                      | A3              |
| 78                      | A4              |
| 79                      | V <sub>DD</sub> |
| 80                      | V <sub>DD</sub> |

# ADSP-21xx

## PIN CONFIGURATIONS

### 100-Pin PGA



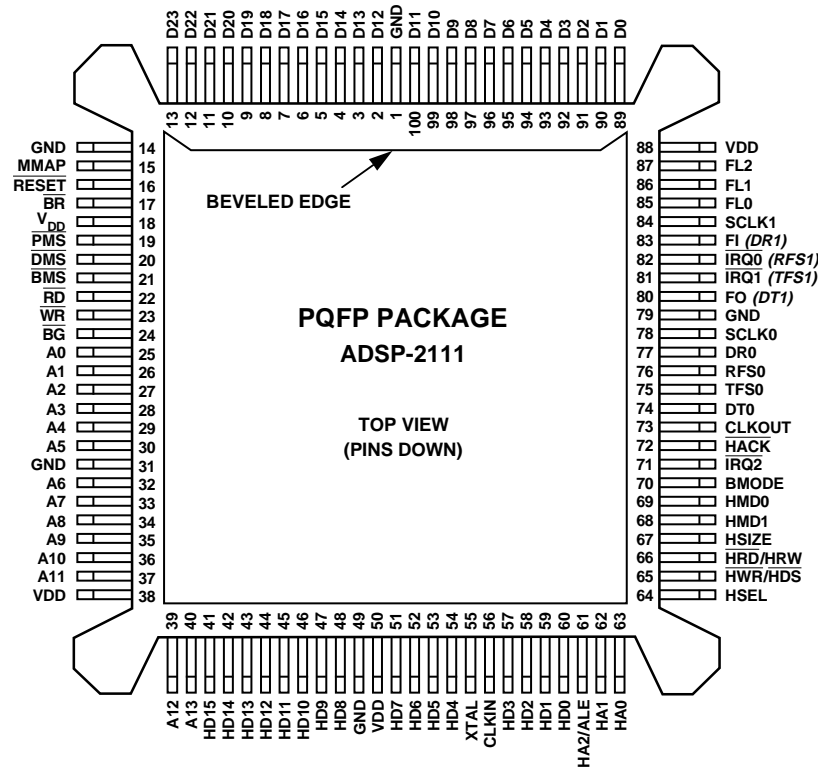
| PGA Number | Pin Name        |
|------------|-----------------|
| N13        | D23             |
| N12        | D21             |
| M13        | MMAP            |
| M12        | GND             |
| L13        | BR              |
| L12        | RESET           |
| K13        | PMS             |
| K12        | V <sub>DD</sub> |
| J13        | BMS             |
| J12        | DMS             |
| H13        | BG              |
| H12        | WR              |
| H11        | RD              |
| G13        | A2              |
| G12        | A0              |
| G11        | A1              |
| F13        | A3              |
| F12        | A4              |
| F11        | A5              |
| E13        | GND             |
| E12        | A6              |
| D13        | A7              |
| D12        | A8              |
| C13        | A9              |
| C12        | A11             |

| PGA Number | Pin Name        |
|------------|-----------------|
| B13        | A10             |
| A13        | V <sub>DD</sub> |
| A12        | A13             |
| B12        | A12             |
| A11        | HD14            |
| B11        | HD15            |
| A10        | HD12            |
| B10        | HD13            |
| A9         | HD10            |
| B9         | HD11            |
| A8         | GND             |
| B8         | HD8             |
| C8         | HD9             |
| A7         | HD6             |
| B7         | V <sub>DD</sub> |
| C7         | HD7             |
| A6         | HD5             |
| B6         | HD4             |
| C6         | XTAL            |
| A5         | CLKIN           |
| B5         | HD3             |
| A4         | HD2             |
| B4         | HD1             |
| A3         | HD0             |
| B3         | HA1             |

| PGA Number | Pin Name    |
|------------|-------------|
| C3         | Index (NC)  |
| A2         | HA2/ALE     |
| A1         | HA0         |
| B1         | HWR/HDS     |
| B2         | HSEL        |
| C1         | HSIZE       |
| C2         | HRD/HRW     |
| D1         | HMD0        |
| D2         | HMD1        |
| E1         | IRQ2        |
| E2         | BMODE       |
| F1         | DT0         |
| F2         | CLKOUT      |
| F3         | HACK        |
| G1         | DR0         |
| G2         | TFS0        |
| G3         | RFS0        |
| H1         | SCLK0       |
| H2         | GND         |
| H3         | FO (DT1)    |
| J1         | IRQ1 (TFS1) |
| J2         | IRQ0 (RFS1) |
| K1         | FI (DR1)    |
| K2         | SCLK1       |
| L1         | FL0         |

| PGA Number | Pin Name        |
|------------|-----------------|
| L2         | FL2             |
| M1         | FL1             |
| N1         | V <sub>DD</sub> |
| N2         | D1              |
| M2         | D0              |
| N3         | D3              |
| M3         | D2              |
| N4         | D5              |
| M4         | D4              |
| N5         | D7              |
| M5         | D6              |
| N6         | D10             |
| M6         | D9              |
| L6         | D8              |
| N7         | D12             |
| M7         | D11             |
| L7         | GND             |
| N8         | D13             |
| M8         | D14             |
| L8         | D15             |
| N9         | D16             |
| M9         | D17             |
| N10        | D18             |
| M10        | D19             |
| N11        | D20             |
| M11        | D22             |

**PIN CONFIGURATIONS**  
**100-Lead Bumpered PQFP**



NOTE: PIN 1 IS LOCATED AT THE CENTER OF THE BEVELED-EDGE SIDE OF THE PACKAGE.

| PQFP Number | Pin Name        |
|-------------|-----------------|
| 1           | GND             |
| 2           | D12             |
| 3           | D13             |
| 4           | D14             |
| 5           | D15             |
| 6           | D16             |
| 7           | D17             |
| 8           | D18             |
| 9           | D19             |
| 10          | D20             |
| 11          | D21             |
| 12          | D22             |
| 13          | D23             |
| 14          | GND             |
| 15          | MMAP            |
| 16          | RESET           |
| 17          | BR              |
| 18          | V <sub>DD</sub> |
| 19          | PMS             |
| 20          | DMS             |
| 21          | BMS             |
| 22          | RD              |
| 23          | WR              |
| 24          | BG              |
| 25          | A0              |

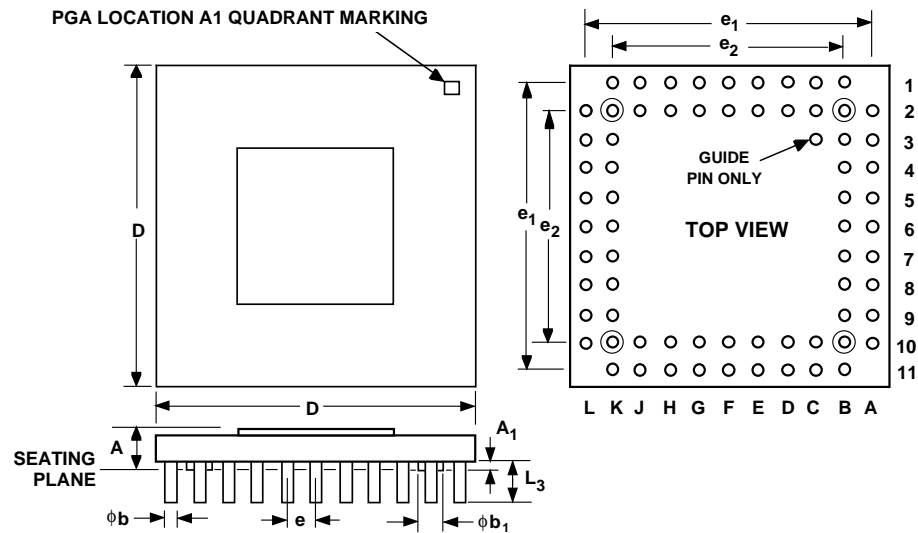
| PQFP Number | Pin Name        |
|-------------|-----------------|
| 26          | A1              |
| 27          | A2              |
| 28          | A3              |
| 29          | A4              |
| 30          | A5              |
| 31          | GND             |
| 32          | A6              |
| 33          | A7              |
| 34          | A8              |
| 35          | A9              |
| 36          | A10             |
| 37          | A11             |
| 38          | V <sub>DD</sub> |
| 39          | A12             |
| 40          | A13             |
| 41          | HD15            |
| 42          | HD14            |
| 43          | HD13            |
| 44          | HD12            |
| 45          | HD11            |
| 46          | HD10            |
| 47          | HD9             |
| 48          | HD8             |
| 49          | GND             |
| 50          | V <sub>DD</sub> |

| PQFP Number | Pin Name |
|-------------|----------|
| 51          | HD7      |
| 52          | HD6      |
| 53          | HD5      |
| 54          | HD4      |
| 55          | XTAL     |
| 56          | CLKIN    |
| 57          | HD3      |
| 58          | HD2      |
| 59          | HD1      |
| 60          | HD0      |
| 61          | HA2/ALE  |
| 62          | HA1      |
| 63          | HA0      |
| 64          | HSEL     |
| 65          | HWR/HDS  |
| 66          | HRD/HRW  |
| 67          | HSIZE    |
| 68          | HMD1     |
| 69          | HMD0     |
| 70          | BMODE    |
| 71          | IRQ2     |
| 72          | HACK     |
| 73          | CLKOUT   |
| 74          | DT0      |
| 75          | TFS0     |

| PQFP Number | Pin Name        |
|-------------|-----------------|
| 76          | RFS0            |
| 77          | DR0             |
| 78          | SCLK0           |
| 79          | GND             |
| 80          | FO (DT1)        |
| 81          | IRQ1 (TFS1)     |
| 82          | IRQ0 (RFS1)     |
| 83          | FI (DR1)        |
| 84          | SCLK1           |
| 85          | FL0             |
| 86          | FL1             |
| 87          | FL2             |
| 88          | V <sub>DD</sub> |
| 89          | D0              |
| 90          | D1              |
| 91          | D2              |
| 92          | D3              |
| 93          | D4              |
| 94          | D5              |
| 95          | D6              |
| 96          | D7              |
| 97          | D8              |
| 98          | D9              |
| 99          | D10             |
| 100         | D11             |

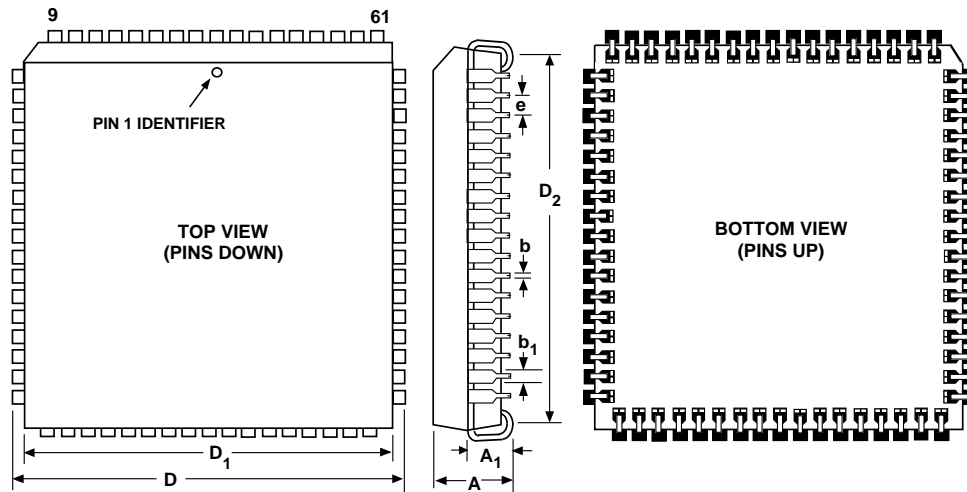
# ADSP-21xx

## OUTLINE DIMENSIONS ADSP-2101 68-Pin Grid Array (PGA)



| SYMBOL         | INCHES |       |       | MILLIMETERS |      |       |
|----------------|--------|-------|-------|-------------|------|-------|
|                | MIN    | TYP   | MAX   | MIN         | TYP  | MAX   |
| A              | 0.123  |       | 0.164 | 3.12        |      | 4.17  |
| A <sub>1</sub> |        | 0.50  |       |             | 1.27 |       |
| $\phi b$       | 0.016  | 0.018 | 0.020 |             | 0.46 |       |
| $\phi b_1$     |        | 0.050 |       |             | 1.27 |       |
| D              | 1.086  |       | 1.110 | 27.58       |      | 28.19 |
| e <sub>1</sub> | 0.988  |       | 1.012 | 25.10       |      | 25.70 |
| e <sub>2</sub> | 0.788  |       | 0.812 | 20.02       |      | 20.62 |
| e              |        | 0.100 |       |             | 2.54 |       |
| L <sub>3</sub> |        | 0.180 |       |             | 4.57 |       |

OUTLINE DIMENSIONS  
 ADSP-21xx  
 68-Lead Plastic Leaded Chip Carrier (PLCC)



| SYMBOL         | INCHES |       |       | MILLIMETERS |      |       |
|----------------|--------|-------|-------|-------------|------|-------|
|                | MIN    | TYP   | MAX   | MIN         | TYP  | MAX   |
| A              | 0.169  |       | 0.175 | 4.29        |      | 4.45  |
| A <sub>1</sub> |        | 0.104 |       |             | 2.64 |       |
| b              | 0.017  |       | 0.019 | 0.43        |      | 0.48  |
| b <sub>1</sub> | 0.027  |       | 0.029 | 0.69        |      | 0.74  |
| D              | 0.985  |       | 0.995 | 25.02       |      | 25.27 |
| D <sub>1</sub> | 0.950  |       | 0.954 | 24.13       |      | 24.23 |
| D <sub>2</sub> | 0.895  |       | 0.925 | 22.73       |      | 23.50 |
| e              |        | 0.050 |       |             | 1.27 |       |

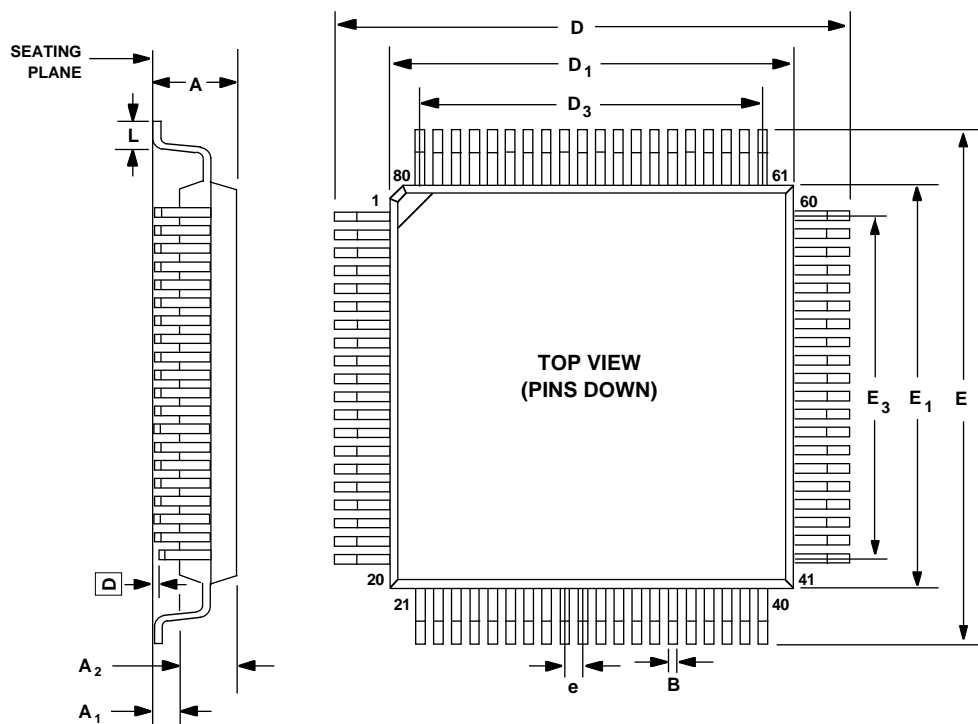
# ADSP-21xx

## OUTLINE DIMENSIONS

### ADSP-21xx

#### 80-Lead Metric Plastic Quad Flatpack (PQFP)

#### 80-Lead Metric Thin Quad Flatpack (TQFP)



PQFP

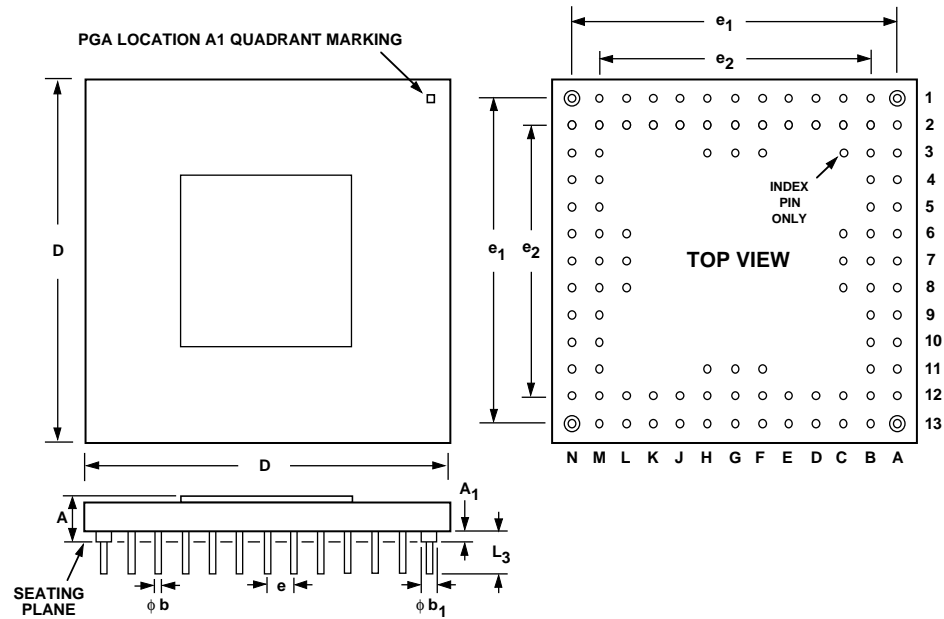
TQFP

| SYMBOL                          | MILLIMETERS |       |       | INCHES |       |       |
|---------------------------------|-------------|-------|-------|--------|-------|-------|
|                                 | MIN         | TYP   | MAX   | MIN    | TYP   | MAX   |
| A                               |             |       | 2.45  |        |       | 0.096 |
| A <sub>1</sub>                  | 0.25        |       |       | 0.010  |       |       |
| A <sub>2</sub>                  | 1.90        | 2.00  | 2.10  | 0.075  | 0.079 | 0.083 |
| D, E                            | 16.95       | 17.20 | 17.45 | 0.667  | 0.678 | 0.690 |
| D <sub>1</sub> , E <sub>1</sub> | 13.90       | 14.00 | 14.10 | 0.547  | 0.551 | 0.555 |
| D <sub>3</sub> , E <sub>3</sub> |             | 12.35 | 12.43 |        | 0.486 | 0.490 |
| L                               | 0.65        | 0.80  | 0.95  | 0.026  | 0.031 | 0.037 |
| e                               | 0.57        | 0.65  | 0.73  | 0.023  | 0.026 | 0.029 |
| B                               | 0.22        | 0.30  | 0.38  | 0.009  | 0.012 | 0.015 |
| □                               |             |       | 0.10  |        |       | 0.004 |

| MILLIMETERS |       |       | INCHES |       |       |
|-------------|-------|-------|--------|-------|-------|
| MIN         | TYP   | MAX   | MIN    | TYP   | MAX   |
|             |       | 1.60  |        |       | 0.063 |
| 0.05        |       | 0.15  | 0.002  |       | 0.006 |
| 1.35        | 1.40  | 1.45  | 0.053  | 0.055 | 0.057 |
| 15.75       | 16.00 | 16.25 | 0.620  | 0.630 | 0.640 |
| 13.95       | 14.00 | 14.05 | 0.549  | 0.551 | 0.553 |
|             | 12.35 | 12.43 |        | 0.486 | 0.490 |
| 0.50        | 0.60  | 0.75  | 0.020  | 0.024 | 0.030 |
| 0.57        | 0.65  | 0.73  | 0.022  | 0.026 | 0.029 |
| 0.25        | 0.30  | 0.35  | 0.010  | 0.012 | 0.014 |
|             |       | 0.10  |        |       | 0.004 |



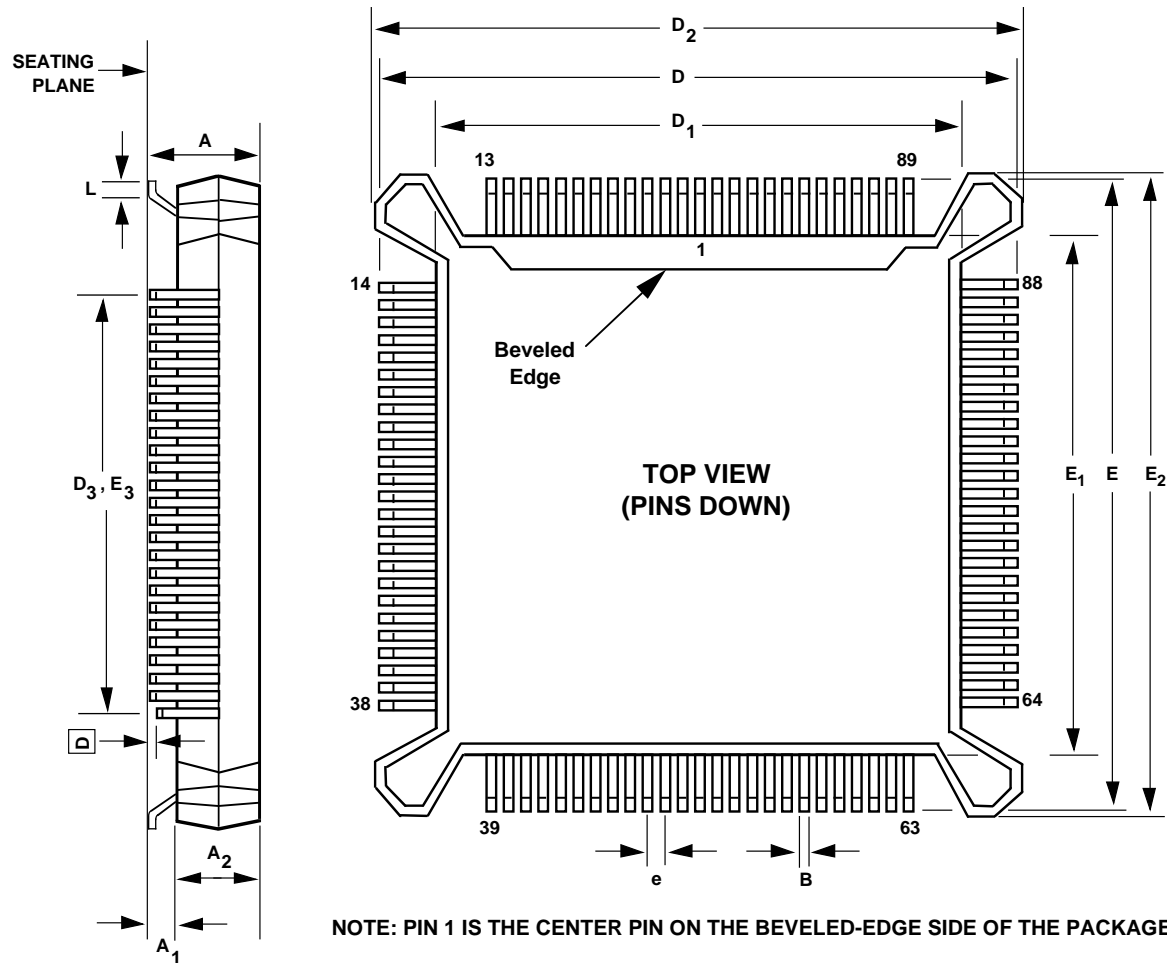
OUTLINE DIMENSIONS  
 ADSP-2111  
 100-Pin Grid Array (PGA)



| SYMBOL         | INCHES |       |       | MILLIMETERS |       |       |
|----------------|--------|-------|-------|-------------|-------|-------|
|                | MIN    | TYP   | MAX   | MIN         | TYP   | MAX   |
| A              | 0.123  |       | 0.169 | 3.12        |       | 4.29  |
| A <sub>1</sub> |        | 0.050 |       |             | 1.27  |       |
| $\phi b$       | 0.016  | 0.018 | 0.020 | 0.41        | 0.46  | 0.51  |
| $\phi b_1$     |        | 0.050 |       |             | 1.27  |       |
| D              | 1.308  | 1.32  | 1.342 | 33.22       | 33.53 | 34.09 |
| e <sub>1</sub> | 1.188  | 1.20  | 1.212 | 30.18       | 30.48 | 30.78 |
| e <sub>2</sub> | 0.988  | 1.00  | 1.012 | 25.10       | 25.4  | 25.70 |
| e              |        | 0.100 |       |             | 2.54  |       |
| L <sub>3</sub> |        | 0.180 |       |             | 4.57  |       |

# ADSP-21xx

## OUTLINE DIMENSIONS ADSP-2111 100-Lead Bumpered Plastic Quad Flatpack (PQFP)



| SYMBOL                          | INCHES |       |       | MILLIMETERS |        |        |
|---------------------------------|--------|-------|-------|-------------|--------|--------|
|                                 | MIN    | TYP   | MAX   | MIN         | TYP    | MAX    |
| A                               |        |       | 0.180 |             |        | 4.572  |
| A <sub>1</sub>                  | 0.020  | 0.030 | 0.040 | 0.508       | 0.762  | 1.016  |
| A <sub>2</sub>                  | 0.130  | 0.140 | 0.150 | 3.302       | 3.556  | 3.810  |
| D, E                            | 0.875  | 0.880 | 0.885 | 22.225      | 22.352 | 22.479 |
| D <sub>1</sub> , E <sub>1</sub> | 0.747  | 0.750 | 0.753 | 18.974      | 19.050 | 19.126 |
| D <sub>2</sub> , E <sub>2</sub> | 0.897  | 0.900 | 0.903 | 22.784      | 22.860 | 22.936 |
| D <sub>3</sub> , E <sub>3</sub> |        | 0.600 | 0.603 |             | 15.240 | 15.316 |
| L                               | 0.036  |       | 0.046 | 0.914       |        | 1.168  |
| e                               | 0.022  | 0.025 | 0.028 | 0.559       | 0.635  | 0.711  |
| B                               | 0.008  |       | 0.012 | 0.203       |        | 0.305  |
| □                               |        |       | 0.004 |             |        | 0.102  |

## ORDERING GUIDE

| Part Number <sup>1</sup>     | Ambient Temperature Range | Instruction Rate (MHz) | Package Description | Package Option <sup>2</sup> |
|------------------------------|---------------------------|------------------------|---------------------|-----------------------------|
| ADSP-2101KG-50               | 0°C to +70°C              | 12.5 MHz               | 68-Pin PGA          | G-68A                       |
| ADSP-2101BG-50               | -40°C to +85°C            | 12.5 MHz               | 68-Pin PGA          | G-68A                       |
| ADSP-2101KP-50               | 0°C to +70°C              | 12.5 MHz               | 68-Lead PLCC        | P-68A                       |
| ADSP-2101BP-50               | -40°C to +85°C            | 12.5 MHz               | 68-Lead PLCC        | P-68A                       |
| ADSP-2101KS-50               | 0°C to +70°C              | 12.5 MHz               | 80-Lead PQFP        | S-80                        |
| ADSP-2101BS-50               | -40°C to +85°C            | 12.5 MHz               | 80-Lead PQFP        | S-80                        |
| ADSP-2101KG-66               | 0°C to +70°C              | 16.67 MHz              | 68-Pin PGA          | G-68A                       |
| ADSP-2101BG-66               | -40°C to +85°C            | 16.67 MHz              | 68-Pin PGA          | G-68A                       |
| ADSP-2101KP-66               | 0°C to +70°C              | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2101BP-66               | -40°C to +85°C            | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2101KS-66               | 0°C to +70°C              | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2101BS-66               | -40°C to +85°C            | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2101KG-80               | 0°C to +70°C              | 20.0 MHz               | 68-Pin PGA          | G-68A                       |
| ADSP-2101BG-80               | -40°C to +85°C            | 20.0 MHz               | 68-Pin PGA          | G-68A                       |
| ADSP-2101KP-80               | 0°C to +70°C              | 20.0 MHz               | 68-Lead PLCC        | P-68A                       |
| ADSP-2101BP-80               | -40°C to +85°C            | 20.0 MHz               | 68-Lead PLCC        | P-68A                       |
| ADSP-2101KS-80               | 0°C to +70°C              | 20.0 MHz               | 80-Lead PQFP        | S-80                        |
| ADSP-2101BS-80               | -40°C to +85°C            | 20.0 MHz               | 80-Lead PQFP        | S-80                        |
| ADSP-2101TG-50               | -55°C to +125°C           | 12.5 MHz               | 68-Pin PGA          | G-68A                       |
| ADSP-2101TG/883B-50          | -55°C to +125°C           | 12.5 MHz               | 68-Pin PGA          | G-68A                       |
| ADSP-2103KP-40 (3.3 V)       | 0°C to +70°C              | 10.24 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2103BP-40 (3.3 V)       | -40°C to +85°C            | 10.24 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2103KS-40 (3.3 V)       | 0°C to +70°C              | 10.24 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2103BS-40 (3.3 V)       | -40°C to +85°C            | 10.24 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2105KP-55               | 0°C to +70°C              | 13.824 MHz             | 68-Lead PLCC        | P-68A                       |
| ADSP-2105BP-55               | -40°C to +85°C            | 13.824 MHz             | 68-Lead PLCC        | P-68A                       |
| ADSP-2115KP-55               | 0°C to +70°C              | 13.824 MHz             | 68-Lead PLCC        | P-68A                       |
| ADSP-2115BP-55               | -40°C to +85°C            | 13.824 MHz             | 68-Lead PLCC        | P-68A                       |
| ADSP-2115KS-55               | 0°C to +70°C              | 13.824 MHz             | 80-Lead PQFP        | S-80                        |
| ADSP-2115BS-55               | -40°C to +85°C            | 13.824 MHz             | 80-Lead PQFP        | S-80                        |
| ADSP-2115KST-55 <sup>3</sup> | 0°C to +70°C              | 13.824 MHz             | 80-Lead TQFP        | ST-80                       |
| ADSP-2115BST-55 <sup>3</sup> | -40°C to +85°C            | 13.824 MHz             | 80-Lead TQFP        | ST-80                       |
| ADSP-2115KP-66               | 0°C to +70°C              | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2115BP-66               | -40°C to +85°C            | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2115KS-66               | 0°C to +70°C              | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2115BS-66               | -40°C to +85°C            | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2115KST-66 <sup>3</sup> | 0°C to +70°C              | 16.67 MHz              | 80-Lead TQFP        | ST-80                       |
| ADSP-2115BST-66 <sup>3</sup> | -40°C to +85°C            | 16.67 MHz              | 80-Lead TQFP        | ST-80                       |
| ADSP-2115KP-80               | 0°C to +70°C              | 20.0 MHz               | 68-Lead PLCC        | P-68A                       |
| ADSP-2115BP-80               | -40°C to +85°C            | 20.0 MHz               | 68-Lead PLCC        | P-68A                       |
| ADSP-2115KS-80               | 0°C to +70°C              | 20.0 MHz               | 80-Lead PQFP        | S-80                        |
| ADSP-2115BS-80               | -40°C to +85°C            | 20.0 MHz               | 80-Lead PQFP        | S-80                        |
| ADSP-2115KST-80 <sup>3</sup> | 0°C to +70°C              | 20.0 MHz               | 80-Lead TQFP        | ST-80                       |
| ADSP-2115BST-80 <sup>3</sup> | -40°C to +85°C            | 20.0 MHz               | 80-Lead TQFP        | ST-80                       |

## NOTES

<sup>1</sup>K = Commercial Temperature Range (0°C to +70°C).

B = Industrial Temperature Range (-40°C to +85°C).

T = Extended Temperature Range (-55°C to +125°C).

G = Ceramic PGA (Pin Grid Array).

P = PLCC (Plastic Leaded Chip Carrier).

S = PQFP (Plastic Quad Flatpack).

ST = TQFP (Thin Quad Flatpack)

<sup>2</sup>For outline information see Package Information section.<sup>3</sup>Minimum order quantities required. Contact factory for further information.

# ADSP-21xx

## ORDERING GUIDE

| Part Number <sup>1</sup> | Ambient Temperature Range | Instruction Rate (MHz) | Package Description | Package Option <sup>2</sup> |
|--------------------------|---------------------------|------------------------|---------------------|-----------------------------|
| ADSP-2111KG-52           | 0°C to +70°C              | 13.0 MHz               | 100-Pin PGA         | G-100A                      |
| ADSP-2111BG-52           | -40°C to +85°C            | 13.0 MHz               | 100-Pin PGA         | G-100A                      |
| ADSP-2111KS-52           | 0°C to +70°C              | 13.0 MHz               | 100-Lead PQFP       | S-100A                      |
| ADSP-2111BS-52           | -40°C to +85°C            | 13.0 MHz               | 100-Lead PQFP       | S-100A                      |
| ADSP-2111KG-66           | 0°C to +70°C              | 16.67 MHz              | 100-Pin PGA         | G-100A                      |
| ADSP-2111BG-66           | -40°C to +85°C            | 16.67 MHz              | 100-Pin PGA         | G-100A                      |
| ADSP-2111KS-66           | 0°C to +70°C              | 16.67 MHz              | 100-Lead PQFP       | S-100A                      |
| ADSP-2111BS-66           | -40°C to +85°C            | 16.67 MHz              | 100-Lead PQFP       | S-100A                      |
| ADSP-2111KG-80           | 0°C to +70°C              | 20.0 MHz               | 100-Pin PGA         | G-100A                      |
| ADSP-2111BG-80           | -40°C to +85°C            | 20.0 MHz               | 100-Pin PGA         | G-100A                      |
| ADSP-2111KS-80           | 0°C to +70°C              | 20.0 MHz               | 100-Lead PQFP       | S-100A                      |
| ADSP-2111BS-80           | -40°C to +85°C            | 20.0 MHz               | 100-Lead PQFP       | S-100A                      |
| ADSP-2111TG-52           | -55°C to +125°C           | 13.0 MHz               | 100-Pin PGA         | G-100A                      |
| ADSP-2111TG/883B-52      | -55°C to +125°C           | 13.0 MHz               | 100-Pin PGA         | G-100A                      |
| ADSP-2161KP-66           | 0°C to +70°C              | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2161BP-66           | -40°C to +85°C            | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2161KS-66           | 0°C to +70°C              | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2161BS-66           | -40°C to +85°C            | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2162KP-40 (3.3 V)   | 0°C to +70°C              | 10.24 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2162BP-40 (3.3 V)   | -40°C to +85°C            | 10.24 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2162KS-40 (3.3 V)   | 0°C to +70°C              | 10.24 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2162BS-40 (3.3 V)   | -40°C to +85°C            | 10.24 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2163KP-66           | 0°C to +70°C              | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2163BP-66           | -40°C to +85°C            | 16.67 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2163KS-66           | 0°C to +70°C              | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2163BS-66           | -40°C to +85°C            | 16.67 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2164KP-40 (3.3 V)   | 0°C to +70°C              | 10.24 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2164BP-40 (3.3 V)   | -40°C to +85°C            | 10.24 MHz              | 68-Lead PLCC        | P-68A                       |
| ADSP-2164KS-40 (3.3 V)   | 0°C to +70°C              | 10.24 MHz              | 80-Lead PQFP        | S-80                        |
| ADSP-2164BS-40 (3.3 V)   | -40°C to +85°C            | 10.24 MHz              | 80-Lead PQFP        | S-80                        |

### NOTES

<sup>1</sup>K = Commercial Temperature Range (0°C to +70°C).

B = Industrial Temperature Range (-40°C to +85°C).

T = Extended Temperature Range (-55°C to +125°C).

G = Ceramic PGA (Pin Grid Array).

P = PLCC (Plastic Leaded Chip Carrier).

S = PQFP (Plastic Quad Flatpack).

<sup>2</sup>For outline information see Package Information section.

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