

# High Speed Amplifiers

| Part Number   |           |           |           | Disable | Supply Voltage |     |      |       |       | Rail-to-Rail |     | A <sub>CL</sub> Min | BW @ A <sub>CL</sub> (MHz) | Slew Rate (V/s)  | Distortion SFDR <sup>1</sup> @ BW |       | Noise (nV/√Hz) | V <sub>OS</sub> Max (mV) | I <sub>B</sub> Max (μA) | I <sub>S</sub> /Amp Typ (mA) | I <sub>OUT</sub> (mA) | Temp Range <sup>2</sup> | SC70 | SOT-23 | SOIC | LFCSP | TSSOP | MSOP                | Price @ 1k <sup>3</sup> (OEM \$U.S.) |
|---------------|-----------|-----------|-----------|---------|----------------|-----|------|-------|-------|--------------|-----|---------------------|----------------------------|------------------|-----------------------------------|-------|----------------|--------------------------|-------------------------|------------------------------|-----------------------|-------------------------|------|--------|------|-------|-------|---------------------|--------------------------------------|
| Single        | Dual      | Triple    | Quad      |         | 3 V            | 5 V | ±5 V | ±12 V | ±15 V | In           | Out |                     |                            |                  | (dBc)                             | (MHz) |                |                          |                         |                              |                       |                         |      |        |      |       |       |                     |                                      |
|               |           |           |           |         |                |     |      |       |       |              |     |                     |                            |                  |                                   |       |                |                          |                         |                              |                       |                         |      |        |      |       |       |                     |                                      |
| Low Cost      |           |           |           |         |                |     |      |       |       |              |     |                     |                            |                  |                                   |       |                |                          |                         |                              |                       |                         |      |        |      |       |       |                     |                                      |
| ADA4851-1     | ADA4851-2 |           | ADA4851-4 | •       | 2.7            | •   | •    |       |       | •            | 1   | 105                 | 375                        | −83 <sup>4</sup> | 1                                 | 10    | 3.5            | 4                        | 2.9                     | 90                           | H <sup>5</sup>        |                         | •    |        |      | •     | •     | 0.56/0.70/1.10      |                                      |
| AD8038        | AD8039    |           |           | •       | •              | •   | •    |       |       |              | 1   | 350                 | 425                        | −90              | 1                                 | 8     | 3              | 0.75                     | 1                       | 20                           | I                     | •                       | •    | •      |      |       |       | 0.86/1.21           |                                      |
| AD8061/AD8063 | AD8062    |           |           | •       | 2.7            | 8   |      |       |       | •            | 1   | 320                 | 650                        | −62              | 5                                 | 8.5   | 6              | 9                        | 6.8                     | 50                           | I                     |                         | •    | •      |      |       | •     | 0.55/0.55/1.50      |                                      |
| AD8055        | AD8056    |           |           |         |                |     | •    |       |       |              | 1   | 300                 | 1400                       | −72              | 10                                | 6     | 5              | 1.2                      | 5.4                     | 60                           | H <sup>5</sup>        |                         | •    | •      |      |       | •     | 0.86/1.62           |                                      |
| AD8057        | AD8058    |           |           |         | •              | •   | •    |       |       |              | 1   | 325                 | 1150                       | −68 <sup>4</sup> | 5                                 | 7     | 5              | 2.5                      | 6                       | 30                           | I                     |                         | •    | •      |      |       | •     | 0.86/1.62           |                                      |
| ADA4857-1     | ADA4857-2 |           |           | •       |                | •   | •    |       |       |              | 1   | 850                 | 2800                       | −88              | 10                                | 4.4   | 4.5            | 3.3                      | 5                       | 50                           | H                     |                         |      | •      | •    |       |       | 1.49/2.53           |                                      |
| ADA4891-1     | ADA4891-2 | ADA4891-3 | ADA4891-4 | •       | 2.7            | •   |      |       |       | •            | 1   | 240                 | 170                        | −79              | 1                                 | 10    | 10             | 50 pA                    | 4.4                     | 150                          | H                     |                         | •    | •      |      | •     | •     | 0.49/0.69/0.89/1.09 |                                      |
| Rail-to-Rail  |           |           |           |         |                |     |      |       |       |              |     |                     |                            |                  |                                   |       |                |                          |                         |                              |                       |                         |      |        |      |       |       |                     |                                      |
| ADA4508-1     | ADA4805-2 |           |           | •       | •              | •   | •    |       |       | •            | 1   | 100                 | 160                        | −106             | 0.1                               | 6     | 0.2            | 0.6                      | 0.48                    | 50                           | H                     | •                       | •    |        | •    |       | •     | 0.95/1.59           |                                      |
| AD8031        | AD8032    |           |           |         | 2.7            | •   | •    |       |       | •            | •   | 1                   | 80                         | 35               | −77                               | 0.5   | 15             | 1.5                      | 1.2                     | 0.9                          | 15                    | I                       |      | •      |      |       | •     | 1.32/1.97           |                                      |
| ADA4853-1     | ADA4853-2 | ADA4853-3 |           | •       | •              | •   |      |       |       | •            | 1   | 100                 | 120                        | −90 <sup>4</sup> | 1                                 | 22    | 4              | 1.6                      | 1.4                     | 120                          | H <sup>5</sup>        | •                       |      |        | •    | •     |       | 0.70/0.98/1.19      |                                      |
|               |           | ADA4855-3 |           | •       | •              | •   |      |       |       | •            | 1   | 410                 | 870                        | −84              | 5                                 | 6.8   | 3              | 3.8                      | 7.8                     | 40                           | H                     |                         |      |        | •    |       |       | 1.39                |                                      |
|               |           | ADA4856-3 |           | •       | •              | •   |      |       |       | •            | 2   | 225                 | 800                        | −92              | 5                                 | 14    | 3.4            | 3.8                      | 7.8                     | 7.5                          | H                     |                         |      |        | •    |       |       | 1.39                |                                      |
| AD8091        | AD8092    |           |           | •       | •              | •   |      |       |       | •            | 1   | 110                 | 145                        | −71 <sup>4</sup> | 5                                 | 16    | 10             | 2.5                      | 4.4                     | 45                           | I                     |                         | •    | •      |      |       | •     | 0.82/0.90           |                                      |
| AD8051        | AD8052    |           | AD8054    | •       | •              | •   | •    |       |       | •            | 1   | 110                 | 170                        | −72 <sup>4</sup> | 5                                 | 16    | 11             | 2.5                      | 4.8                     | 45                           | H                     |                         | •    | •      |      | •     | •     | 0.86/1.62/2.88      |                                      |
| AD8029        | AD8030    |           | AD8040    | •       | 2.7            | •   | •    |       |       | •            | •   | 1                   | 125                        | 62               | −74                               | 1     | 16.5           | 5                        | 1.3                     | 1.3                          | 20                    | H                       | •    |        | •    |       | •     | 0.86/1.21/1.62      |                                      |
| AD8041        | AD8042    |           | AD8044    | •       | •              | •   | •    |       |       | •            | 1   | 170                 | 225                        | −78 <sup>4</sup> | 5                                 | 15    | 9.8            | 3.2                      | 6                       | 50                           | I                     |                         |      | •      |      |       |       | 1.95/2.28/4.00      |                                      |
| ADA4850-1     | ADA4850-2 |           |           | •       | 2.7            | •   |      |       |       | •            | 1   | 175                 | 220                        | −81 <sup>4</sup> | 1                                 | 10    | 4.2            | 4.2                      | 2.5                     | 90                           | H                     |                         |      |        | •    |       |       | 0.56/0.70           |                                      |
| AD8027        | AD8028    |           |           | •       | •              | •   | •    |       |       | •            | •   | 1                   | 190                        | 100              | −120                              | 1     | 4.3            | 0.9                      | 6                       | 6.5                          | 25                    | H <sup>5</sup>          |      | •      | •    |       | •     | 1.20/1.91           |                                      |

<sup>1</sup>Spurious-free dynamic range—distortion @ worst harmonic.

<sup>2</sup>Temperature ranges: I = industrial (−40°C to +85°C), H = extended industrial (−40°C to +105°C/+125°C).

<sup>3</sup>USD 1000s, recommended resale, FOB U.S.

<sup>4</sup>THD—total harmonic distortion.

<sup>5</sup>Recommended for automotive.

<sup>6</sup>Referred to output.

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For more information on ADI high speed differential amplifiers, visit our website at [www.analog.com/adcdrivers](http://www.analog.com/adcdrivers).



| Part Number               |           |        |           | Disable | Supply Voltage |     |      |       |       | Rail-to-Rail |     | A <sub>CL</sub> Min | BW @ A <sub>CL</sub> (MHz) | Slew Rate (V/s) | Distortion SFDR <sup>1</sup> @ BW |       | Noise (nV/√Hz) | V <sub>OS</sub> Max (mV) | I <sub>B</sub> Max (μA) | I <sub>S</sub> /Amp Typ (mA) | I <sub>OUT</sub> (mA) | Temp Range <sup>2</sup> | SC70 | SOT-23 | SOIC | LFCSP | TSSOP | MSOP                           | Price @ 1k <sup>3</sup> (OEM \$U.S.) |
|---------------------------|-----------|--------|-----------|---------|----------------|-----|------|-------|-------|--------------|-----|---------------------|----------------------------|-----------------|-----------------------------------|-------|----------------|--------------------------|-------------------------|------------------------------|-----------------------|-------------------------|------|--------|------|-------|-------|--------------------------------|--------------------------------------|
| Single                    | Dual      | Triple | Quad      |         | 3 V            | 5 V | ±5 V | ±12 V | ±15 V | In           | Out |                     |                            |                 | (dBc)                             | (MHz) |                |                          |                         |                              |                       |                         |      |        |      |       |       |                                |                                      |
| Low Noise, Low Distortion |           |        |           |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                |                          |                         |                              |                       |                         |      |        |      |       |       |                                |                                      |
| ADA4807-1                 | ADA4807-2 |        | ADA4807-4 | •       | •              | •   | •    |       |       | •            | •   | 1                   | 160                        | 300             | −112                              | 0.1   | 3              | 0.2                      | 6                       | 0.95                         | 30                    | H                       | •    | •      |      | •     | •     | •                              | 1.33/2.19/3.05                       |
| AD8099                    |           |        |           | •       |                | •   | •    |       |       |              |     | 2                   | 700                        | 1350            | −92 <sup>4</sup>                  | 10    | 0.95           | 0.5                      | 1                       | 15                           | 40                    | H <sup>5</sup>          |      |        | •    | •     |       |                                | 2.00                                 |
| ADA4841-1                 | ADA4841-2 |        |           | •       | 2.7            | •   | •    |       |       |              | •   | 1                   | 80                         | 13              | −105                              | 0.1   | 2.1            | 0.5                      | 5.3                     | 1.2                          | 60                    | H <sup>5</sup>          |      | •      | •    | •     |       | •                              | 1.61/2.32                            |
|                           | ADA4895-2 |        |           | •       | •              | •   | •    |       |       |              | •   | 10                  | 236                        | 943             | −96                               | 0.1   | 2              | 0.35                     | 16                      | 3                            | 72                    | H                       |      |        |      |       | •     | 3.21                           |                                      |
|                           | ADA4896-2 |        |           |         |                | •   | •    | •     |       |              | •   | 1                   | 230                        | 120             | −115                              | 0.1   | 1              | 0.5                      | 17                      | 3                            | 80                    | H <sup>5</sup>          |      |        |      | •     | •     | 3.21                           |                                      |
| ADA4897-1                 | ADA4897-2 |        |           | •       | •              | •   | •    |       |       |              | •   | 1                   | 230                        | 120             | −115                              | 0.1   | 1              | 0.5                      | 17                      | 3                            | 80                    | H <sup>5</sup>          |      | •      | •    |       | •     | 1.89/3.21                      |                                      |
| AD8021                    |           |        |           | •       |                | •   | •    | •     |       |              |     | 1                   | 560                        | 130             | −93 <sup>4</sup>                  | 1     | 2.1            | 1                        | 11.3                    | 7.8                          | 70                    | I                       |      |        | •    |       | •     | 1.31                           |                                      |
|                           | AD8022    |        |           |         |                | •   | •    | •     |       |              |     | 1                   | 130                        | 50              | −95                               | 1     | 2.5            | 6                        | 5                       | 4                            | 55                    | I                       |      |        | •    |       | •     | 2.38                           |                                      |
| AD8045                    |           |        |           |         |                | •   | •    |       |       |              |     | 1                   | 1000                       | 1350            | −95                               | 10    | 3              | 1                        | 6.3                     | 16                           | 70                    | H <sup>5</sup>          |      |        | •    | •     |       | 1.41                           |                                      |
| AD8048                    |           |        |           |         |                | •   | •    |       |       |              |     | 2                   | 260                        | 1000            | −72                               | 5     | 3.8            | 3                        | 3.5                     | 6.6                          | 50                    | I                       |      |        | •    |       |       | 2.30                           |                                      |
| ADA4857-1                 | ADA4857-2 |        |           | •       |                | •   | •    |       |       |              |     | 1                   | 850                        | 2800            | −108 <sup>4</sup>                 | 1     | 4.4            | 1                        | 1.65                    | 5                            | 50                    | H                       |      |        | •    | •     |       | 1.49/2.53                      |                                      |
| AD8047                    |           |        |           |         |                | •   | •    |       |       |              |     | 1                   | 250                        | 750             | −78                               | 5     | 5.2            | 3                        | 3.5                     | 6.6                          | 50                    | I                       |      |        | •    |       |       | 2.53                           |                                      |
| FastFET™                  |           |        |           |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                |                          |                         |                              |                       |                         |      |        |      |       |       |                                |                                      |
| ADA4817-1                 | ADA4817-2 |        |           | •       |                | •   | •    |       |       |              |     | 1                   | 1050                       | 870             | −90                               | 10    | 4              | 2                        | 20 pA                   | 19                           | 40                    | H                       |      |        | •    | •     |       | 2.95/4.98                      |                                      |
| AD8067                    |           |        |           |         |                | •   | •    | •     |       |              | •   | 8                   | 54                         | 500             | −95                               | 1     | 6.6            | 1                        | 5 pA                    | 6.6                          | 30                    | I                       |      | •      |      |       |       | 1.89                           |                                      |
| AD8065                    | AD8066    |        |           |         |                | •   | •    | •     |       |              | •   | 1                   | 145                        | 180             | −88                               | 1     | 7              | 1.5                      | 7 pA                    | 6.4                          | 35                    | I                       |      | •      |      |       | •     | 1.61/2.32                      |                                      |
| AD8033                    | AD8034    |        |           |         |                | •   | •    | •     |       |              | •   | 1                   | 80                         | 80              | −82 <sup>4</sup>                  | 1     | 11             | 2                        | 11 pA                   | 3.3                          | 25                    | I                       | •    | •      |      |       |       | 1.03/1.61                      |                                      |
|                           | AD823A    |        |           |         | •              | •   | •    | •     | ±18   |              | •   | 1                   | 17                         | 30              | −110 <sup>4</sup>                 | 0.2   | 14             | 0.7                      | 25 pA                   | 5.1                          | 40                    | I                       |      |        | •    |       | •     | 2.39                           |                                      |
| High Output Current       |           |        |           |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                |                          |                         |                              |                       |                         |      |        |      |       |       |                                |                                      |
|                           | AD8397    |        |           |         | •              | •   | •    | •     |       |              | •   | 1                   | 69                         | 53              | −87                               | 0.1   | 4.5            | 1                        | 2                       | 5.5                          | 310                   | I                       |      |        | •    |       |       | 2.32                           |                                      |
| AD8390                    |           |        |           | •       |                |     | •    | •     |       |              |     | 5                   | 60                         | 300             | −82 <sup>4</sup>                  | 1     | 8              | 3                        | 7                       | 3.8                          | 400                   | I                       |      |        |      | •     |       | Last time buy                  |                                      |
|                           |           |        | AD8392    | •       |                |     | •    | •     |       |              |     | 1                   | 40                         | 900             | −72 <sup>4</sup>                  | 1     | 4.3            | 5                        | 15                      | 3.6                          | 400                   | I                       |      |        |      | •     | •     | Obsolete, replacement: AD8392A |                                      |
| High Supply Voltage       |           |        |           |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                |                          |                         |                              |                       |                         |      |        |      |       |       |                                |                                      |
| AD829                     |           |        |           |         |                |     | •    | •     | •     |              |     | 1                   | 120                        | 150             | −55 <sup>4</sup>                  | 1     | 1.7            | 1                        | 7                       | 5                            | 32                    | H                       |      |        | •    |       |       | 3.27                           |                                      |
| AD818                     | AD828     |        |           |         |                | •   | •    | •     | •     |              |     | 2                   | 130                        | 450             | −78 <sup>4</sup>                  | 1     | 10             | 2                        | 6.6                     | 7                            | 50                    | I                       |      |        | •    |       |       | 1.96/2.43                      |                                      |
| ADA4898-1                 | ADA4898-2 |        |           | •       |                |     | •    | •     | •     |              |     | 1                   | 65                         | 55              | −116                              | 0.1   | 0.9            | 0.15                     | 0.5                     | 7.7                          | 40                    | H                       |      |        | •    |       |       | 2.29/3.21                      |                                      |
| AD844                     |           |        |           |         |                |     | •    | •     | ±18   |              |     | 2                   | 60                         | 2000            | −86 <sup>4</sup>                  | 0.1   | 2              | 0.3                      | 0.45                    | 6.5                          | 50                    | H                       |      |        | •    |       |       | 2.78                           |                                      |
| AD847                     | AD827     |        |           |         |                |     | •    | •     | •     |              |     | 1                   | 50                         | 300             | −92 <sup>4</sup>                  | 0.1   | 15             | 2                        | 7                       | 4.8                          | 32                    | H/I                     |      |        | •    |       |       | 2.86/5.89                      |                                      |
| AD817                     | AD826     |        |           |         |                | •   | •    | •     | •     |              |     | 1                   | 50                         | 350             | −78 <sup>4</sup>                  | 1     | 15             | 2                        | 6.6                     | 7                            | 50                    | I                       |      |        | •    |       |       | 1.76/2.43                      |                                      |

<sup>1</sup>Spurious-free dynamic range—distortion @ worst harmonic.

<sup>2</sup>Temperature ranges: I = industrial (−40°C to +85°C), H = extended industrial (−40°C to +105°C/+125°C).

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<sup>4</sup>THD—total harmonic distortion.

<sup>5</sup>Recommended for automotive.

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|------------------|-----------|-----------|------|---------|----------------|-----|------|-------|-------|--------------|-----|---------------------|----------------------------|-----------------|-----------------------------------|-------|-----------------|--------------------------|-------------------------|------------------------------|-----------------------|-------------------------|------|--------|------|-------|-------|------|--------------------------------------|
| Single           | Dual      | Triple    | Quad |         | 3 V            | 5 V | ±5 V | ±12 V | ±15 V | In           | Out |                     |                            |                 | (dBc)                             | (MHz) |                 |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |
| Low Cost         |           |           |      |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                 |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |
| ADA4860-1        |           |           |      | •       |                | •   | •    |       |       |              |     | 1                   | 800                        | 790             | −75 <sup>4</sup>                  | 10    | 4               | 13                       | 10                      | 6                            | 85                    | I                       |      | •      |      |       |       |      | 0.56                                 |
|                  |           | ADA4861-3 |      | •       |                | •   | •    |       |       |              |     | 1                   | 730                        | 680             | −68 <sup>4</sup>                  | 10    | 3.8             | 13                       | 13                      | 6                            | 100                   | I                       |      |        | •    |       |       |      | 0.96                                 |
|                  |           | ADA4862-3 |      | •       |                | •   | •    |       |       |              |     | 2                   | 500                        | 1050            | −68 <sup>4</sup>                  | 10    | 10.6            | 25                       | 1                       | 5.5                          | 75                    | I                       |      |        | •    |       |       |      | 0.96                                 |
| AD8014           |           |           |      |         |                | •   | •    |       |       |              |     | 1                   | 480                        | 4000            | −70 <sup>4</sup>                  | 5     | 3.5             | 5                        | 15                      | 1.1                          | 50                    | I                       |      | •      | •    |       |       |      | 1.20                                 |
|                  | AD8072    | AD8073    |      |         |                | •   | •    |       |       |              |     | 1                   | 100                        | 500             | −64 <sup>4</sup>                  | 5     | 3               | 6                        | 12                      | 3.5                          | 30                    | I                       |      |        | •    |       |       | •    | 1.67/2.18                            |
| High Performance |           |           |      |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                 |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |
| AD8000           |           |           |      | •       |                | •   | •    |       |       |              |     | 1                   | 1500                       | 4100            | −75                               | 20    | 1.6             | 10                       | 45                      | 13.5                         | 100                   | H <sup>5</sup>          |      |        | •    | •     |       |      | 1.70/2.92                            |
| AD8009           |           |           |      |         |                | •   | •    |       |       |              |     | 1                   | 1000                       | 5500            | −38                               | 20    | 1.9             | 5                        | 150                     | 14                           | 175                   | I                       |      | •      | •    |       |       |      | 1.77                                 |
| AD8001           | AD8002    |           |      |         |                |     | •    |       |       |              |     | 1                   | 880                        | 1000            | −66                               | 5     | 2               | 5.5                      | 25                      | 5                            | 70                    | I                       |      | •      | •    |       |       |      | 1.51/2.86                            |
| AD8007           | AD8008    |           |      |         |                | •   | •    |       |       |              |     | 1                   | 650                        | 1000            | −83                               | 20    | 2.7             | 4                        | 8                       | 9                            | 30                    | I                       | •    | •      | •    |       |       | •    | 1.33/2.22                            |
| AD8011           |           |           |      |         |                | •   | •    |       |       |              |     | 1                   | 400                        | 3500            | −75 <sup>4</sup>                  | 5     | 2               | 5                        | 15                      | 1                            | 30                    | I                       |      |        | •    |       |       |      | 2.30                                 |
|                  | AD8012    |           |      |         |                | •   | •    |       |       |              |     | 1                   | 350                        | 2250            | −66                               | 5     | 2.5             | 4                        | 12                      | 1.7                          | 125                   | I                       |      |        | •    |       |       | •    | 2.17                                 |
|                  |           | AD8023    |      | •       |                | •   | •    |       |       |              |     | 1                   | 400                        | 1200            | −78 <sup>4</sup>                  | 5     | 2               | 5                        | 45                      | 6.2                          | 70                    | I                       |      |        | •    |       |       |      | 5.20                                 |
| AD8005           |           |           |      |         |                | •   | •    |       |       |              |     | 1                   | 270                        | 1500            | −53 <sup>4</sup>                  | 5     | 4               | 30                       | 10                      | 0.4                          | 10                    | I                       |      | •      |      |       |       |      | 1.64                                 |
|                  |           | AD8004    |      |         |                | •   | •    |       |       |              |     | 1                   | 250                        | 3000            | −78 <sup>4</sup>                  | 5     | 1.5             | 3.5                      | 90                      | 3.5                          | 50                    | I                       |      |        | •    |       |       |      | 4.40                                 |
|                  | ADA4310-1 |           |      | •       |                | •   | •    |       |       |              |     | 2                   | 190                        | 820             | −95 <sup>4</sup>                  | 1     | 2.9             | 1                        | 6                       | 7.6                          | 250                   | I                       |      |        |      | •     |       | •    | 1.05                                 |
|                  | AD8017    |           |      |         |                | •   | •    |       |       |              |     | 1                   | 160                        | 1600            | −78                               | 0.5   | 1.9             | 3                        | 67                      | 7                            | 270                   | I                       |      |        | •    |       |       |      | 2.25                                 |
|                  |           | AD8013    |      | •       |                | •   | •    |       |       |              |     | 1                   | 140                        | 1000            | −76 <sup>4</sup>                  | 5     | 3.5             | 5                        | 15                      | 4                            | 30                    | I                       |      |        | •    |       |       |      | 4.88                                 |
| With Charge Pump |           |           |      |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                 |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |
|                  | ADA4858-3 |           |      | •       | •              | •   |      |       |       |              |     | 1                   | 600                        | 600             | −71                               | 5     | 4               | 14                       | 13                      | 19                           | 21                    | H                       |      |        |      | •     |       |      | 1.69                                 |
|                  |           | ADA4859-3 |      | •       | •              | •   |      |       |       |              |     | 2                   | 195                        | 740             | −70                               | 5     | 17 <sup>6</sup> | 4.5                      | 2                       | 17                           | 19                    | H                       |      |        |      | •     |       |      | 1.69                                 |
| Fixed Gain       |           |           |      |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                 |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |
| Buffers          |           |           |      |         |                |     |      |       |       |              |     |                     |                            |                 |                                   |       |                 |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |
|                  |           | AD8074    |      | •       |                | •   |      |       |       |              |     | 1                   | 600                        | 1600            | −80 <sup>4</sup>                  | 5     | 19.5            | 27                       | 9.5                     | 7.2                          | 70                    | I                       |      |        |      |       | •     |      | 2.22                                 |
|                  |           | AD8075    |      | •       |                | •   |      |       |       |              |     | 2                   | 550                        | 1350            | −74 <sup>4</sup>                  | 5     | 22              | 40                       | 10                      | 8                            | 70                    | I                       |      |        |      |       | •     |      | 2.22                                 |
|                  | AD8079    |           |      |         |                | •   |      |       |       |              |     | 2                   | 260                        | 800             | −78 <sup>4</sup>                  | 5     | 2               | 15                       | 6                       | 5                            | 70                    | I                       |      |        | •    |       |       |      | 4.56                                 |

<sup>1</sup>Spurious-free dynamic range—distortion @ worst harmonic.

<sup>2</sup>Temperature ranges: I = industrial (−40°C to +85°C), H = extended industrial (−40°C to +105°C/+125°C).

<sup>3</sup>USD 1000s, recommended resale, FOB U.S.

<sup>4</sup>THD—total harmonic distortion.

<sup>5</sup>Recommended for automotive.

<sup>6</sup>Referred to output.

| Part Number      |               |           |           | Disable | Supply Voltage |     |      |       |       | Rail-to-Rail |     | A <sub>CL</sub> Min | BW @ A <sub>CL</sub> (MHz) | Slew Rate (V/s)  | Distortion SFDR <sup>1</sup> @ BW |                  | Noise (nV/√Hz)    | V <sub>OS</sub> Max (mV) | I <sub>B</sub> Max (μA) | I <sub>S</sub> /Amp Typ (mA) | I <sub>OUT</sub> (mA) | Temp Range <sup>2</sup> | SC70 | SOT-23 | SOIC | LFCSP | TSSOP | MSOP | Price @ 1k <sup>3</sup> (OEM \$U.S.) |           |
|------------------|---------------|-----------|-----------|---------|----------------|-----|------|-------|-------|--------------|-----|---------------------|----------------------------|------------------|-----------------------------------|------------------|-------------------|--------------------------|-------------------------|------------------------------|-----------------------|-------------------------|------|--------|------|-------|-------|------|--------------------------------------|-----------|
| Single           | Dual          | Triple    | Quad      |         | 3 V            | 5 V | ±5 V | ±12 V | ±15 V | In           | Out |                     |                            |                  | (dBc)                             | (MHz)            |                   |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |           |
| Clamp Amplifiers | Output Clamps |           |           |         |                |     |      |       |       |              |     |                     |                            |                  |                                   |                  |                   |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |           |
|                  | AD8037        |           |           |         |                |     |      | •     |       |              |     |                     | 2                          | 270              | 1500                              | −77 <sup>4</sup> | 10                | 4.5                      | 7                       | 9                            | 18.5                  | 70                      | I    |        |      | •     |       |      | 4.17                                 |           |
|                  | AD8036        |           |           |         |                |     |      | •     |       |              |     |                     | 1                          | 240              | 1200                              | −81 <sup>4</sup> | 10                | 6.7                      | 7                       | 10                           | 20.5                  | 70                      | H/I  |        |      | •     |       |      | 4.33                                 |           |
| Differential     | Drivers       |           |           |         |                |     |      |       |       |              |     |                     |                            |                  |                                   |                  |                   |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |           |
|                  | ADA4927-1     |           | ADA4927-2 |         | •              |     | •    | •     |       |              |     |                     | 1                          | 2300             | 5000                              | −87              | 100               | 1.4                      | 1.3                     | 15                           | 20                    | 65                      | H    |        |      |       | •     |      |                                      | 3.79/6.29 |
|                  | ADA4930-1     |           | ADA4930-2 |         | •              | •   | •    |       |       |              |     |                     | 1                          | 1350             | 3400                              | −75              | 100               | 1.2                      | 3.1                     | 16.8                         | 34                    | 30                      | H    |        |      |       | •     |      |                                      | 3.79/6.59 |
|                  | ADA4932-1     |           | ADA4932-2 |         | •              | •   | •    | •     |       |              |     |                     | 1                          | 560              | 2800                              | −90              | 20                | 3.6                      | 2.2                     | 5.2                          | 9.6                   | 80                      | H    |        |      |       | •     |      |                                      | 2.95/5.29 |
|                  | ADA4937-1     |           | ADA4937-2 |         | •              | •   | •    |       |       |              |     |                     | 1                          | 1900             | 6000                              | −84              | 70                | 2.2                      | 2.5                     | 30                           | 39.5                  | 100                     | I    |        |      |       | •     |      |                                      | 3.79/5.69 |
|                  | ADA4938-1     |           | ADA4938-2 |         | •              |     | •    | •     |       |              |     |                     | 1                          | 1000             | 4700                              | −82              | 50                | 2.6                      | 1                       | 18                           | 37                    | 75                      | I    |        |      |       | •     |      |                                      | 3.79/5.69 |
|                  | ADA4939-1     |           | ADA4939-2 |         | •              | •   | •    |       |       |              |     |                     | 2                          | 1400             | 6800                              | −77              | 100               | 2.3                      | 3.4                     | 26                           | 36.5                  | 100                     | H    |        |      |       | •     |      |                                      | 3.79/5.69 |
|                  | ADA4950-1     |           | ADA4950-2 |         | •              | •   | •    | •     |       |              |     |                     | 1                          | 750              | 2900                              | −98              | 20                | 9.2 <sup>6</sup>         | 2.5                     | N/A                          | 9.5                   | 114                     | H    |        |      |       | •     |      |                                      | 2.99/5.29 |
|                  | ADA4960-1     |           |           |         | •              |     | •    |       |       |              |     |                     | 2                          | 5000             | 8700                              | −73              | 1000              | 4.8                      | 20                      | 20                           | 60                    | 17.5                    | I    |        |      |       | •     |      |                                      | 6.95      |
|                  | AD8139        |           |           |         | •              | •   | •    |       |       |              | •   | 1                   | 410                        | 800              | −85                               | 5                | 2.25              | 0.5                      | 8                       | 24.5                         | 100                   | H <sup>5</sup>          |      |        |      | •     | •     |      |                                      | 3.75      |
|                  | AD8131        |           |           |         | •              | •   | •    |       |       |              |     | 2                   | 400                        | 2000             | −68                               | 5                | 25                | 7                        | 6                       | 11.5                         | 60                    | H                       |      |        |      | •     |       |      | •                                    | 1.82      |
|                  | AD8132        |           |           |         | •              | •   | •    |       |       |              |     | 1                   | 350                        | 1200             | −83                               | 5                | 8                 | 3.5                      | 7                       | 12                           | 70                    | H <sup>5</sup>          |      |        |      | •     |       |      | •                                    | 1.67      |
|                  | AD8138        |           |           |         | •              | •   | •    |       |       |              |     | 1                   | 320                        | 1150             | −85                               | 20               | 5                 | 2.5                      | 7                       | 20                           | 95                    | I                       |      |        |      | •     |       |      | •                                    | 3.75      |
|                  | AD8137        |           |           |         | •              | •   | •    | •     |       |              | •   | 1                   | 110                        | 450              | −90                               | 0.5              | 8.25              | 2.6                      | 1                       | 3.2                          | 20                    | H <sup>5</sup>          |      |        |      | •     | •     |      |                                      | 1.10      |
|                  | ADA4922-1     |           |           |         | •              |     | •    | •     | •     |              |     | 2                   | 38                         | 260              | −99                               | 0.1              | 12 <sup>6</sup>   | 1.1                      | 3.5                     | 9.4                          | 40                    | I                       |      |        |      | •     | •     |      |                                      | 3.63      |
|                  | ADA4941-1     |           |           |         | •              | •   | •    | •     |       |              | •   | 2                   | 31                         | 24.5             | −110 <sup>4</sup>                 | 0.1              | 10.2 <sup>6</sup> | 0.8                      | 3                       | 2.3                          | 25                    | I                       |      |        |      | •     | •     |      |                                      | 2.42      |
|                  | ADA4940-1     |           | ADA4940-2 |         | •              | •   | •    |       |       |              | •   | 1                   | 260                        | 95               | −96                               | 1                | 3.9               | 0.4                      | 1.6                     | 1.25                         | 46                    | H <sup>2</sup>          |      |        |      | •     | •     |      |                                      | 1.59/2.59 |
|                  | Receivers     |           |           |         |                |     |      |       |       |              |     |                     |                            |                  |                                   |                  |                   |                          |                         |                              |                       |                         |      |        |      |       |       |      |                                      |           |
| ADA4830-1        |               | ADA4830-2 |           | •       | •              | •   |      |       |       | •            | 0.5 | 85                  | 250                        | −74              | 5                                 | 28               | 50                | N/A                      | 6.8                     | 125                          | H <sup>5</sup>        |                         |      |        | •    |       |       |      | 0.61/0.85                            |           |
| AD8130           |               |           |           | •       |                | •   | •    | •     |       |              | 1   | 270                 | 1090                       | −74 <sup>4</sup> | 5                                 | 12.5             | 1.8               | 3.5                      | 10.8                    | 40                           | I                     |                         |      |        | •    |       |       | •    | 1.57                                 |           |
| AD8129           |               |           |           | •       |                | •   | •    | •     |       |              | 10  | 200                 | 1060                       | −68 <sup>4</sup> | 5                                 | 4.5              | 0.8               | 3.5                      | 10.8                    | 40                           | I                     |                         |      |        | •    |       |       | •    | 1.57                                 |           |

<sup>1</sup>Spurious-free dynamic range—distortion @ worst harmonic.

<sup>2</sup>Temperature ranges: I = industrial (−40°C to +85°C), H = extended industrial (−40°C to +105°C/+125°C).

<sup>3</sup>USD 1000s, recommended resale, FOB U.S.

<sup>4</sup>THD—total harmonic distortion.

<sup>5</sup>Recommended for automotive.

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