

# NATIONAL PRODUCTS Analog ICs

National Products  
from Texas Instruments

RoHS Compliant This product is RoHS compliant.

## RS-232

| MOUSER STOCK NO.     | National Products Part No. | Package Style | Data Rate (kbps) | Drivers Per Package | Receivers Per Package | ESD HBM (kV) | Supply Voltage (V) | I <sub>cc</sub> (Max.) (mA) | Price Each |      |      |
|----------------------|----------------------------|---------------|------------------|---------------------|-----------------------|--------------|--------------------|-----------------------------|------------|------|------|
|                      |                            |               |                  |                     |                       |              |                    |                             | 1          | 25   | 100  |
| 926-DS14C232CM/NOPB  | DS14C232CM/NOPB            | SOIC-16       | 20               | 2                   | 2                     | 2.5          | 5                  | 3                           | 3.08       | 2.47 | 2.25 |
| 926-DS14C232CN/NOPB  | DS14C232CN/NOPB            | DIP-16        | 20               | 2                   | 2                     | 2.5          | 5                  | 3                           | 3.50       | 2.81 | 2.56 |
| 926-DS14C232TM/NOPB  | DS14C232TM/NOPB            | SOIC-16       | 20               | 2                   | 2                     | 2.5          | 5                  | 3                           | 3.70       | 2.97 | 2.70 |
| 926-DS14C89AM/NOPB   | DS14C89AM/NOPB             | SOIC-14       | 20               | -                   | 4                     | 2            | 5                  | 0.9                         | 1.89       | 1.52 | 1.37 |
| 926-DS14C89AN/NOPB   | DS14C89AN/NOPB             | DIP-14        | 20               | -                   | 4                     | 2            | 5                  | 0.9                         | 3.10       | 2.50 | 2.25 |
| 926-DS14C335MSA/NOPB | DS14C335MSA/NOPB           | SSOP-28       | 128              | 3                   | 5                     | 2            | 3.3                | 20                          | 9.83       | 8.05 | 7.27 |
| 926-DS14185WMX/NOPB  | DS14185WMX/NOPB            | SOIC-20       | 200              | 3                   | 5                     | 1.5          | 7                  | 30                          | 1.80       | 1.38 | 1.25 |

## RS-422

| MOUSER STOCK NO.      | National Products Part No. | Package Style | Drivers Per Package | Receivers Per Package | Process | Supply Voltage (V) | I <sub>cc</sub> (Max.) (mA) | Operating Temperature (°C) | Price Each |      |      |
|-----------------------|----------------------------|---------------|---------------------|-----------------------|---------|--------------------|-----------------------------|----------------------------|------------|------|------|
|                       |                            |               |                     |                       |         |                    |                             |                            | 1          | 25   | 100  |
| 926-DS26C31TM/NOPB    | DS26C31TM/NOPB             | SOIC-16       | 4                   | -                     | CMOS    | 5                  | 0.5                         | -40 to 85                  | 1.81       | 1.46 | 1.31 |
| 926-DS26C31TMX/NOPB   | DS26C31TMX/NOPB            | SOIC-16       | 4                   | -                     | CMOS    | 5                  | 0.5                         | -40 to 85                  | 2.04       | 1.57 | 1.43 |
| 926-DS26C32ATM/NOPB   | DS26C32ATM/NOPB            | SOIC-16       | -                   | 4                     | CMOS    | 5                  | 23                          | -40 to 85                  | 1.89       | 1.52 | 1.37 |
| 926-DS26C32ATM        | DS26C32ATM                 | SOIC-16       | -                   | 4                     | CMOS    | 7                  | 23                          | -40 to 85                  | 1.89       | 1.48 | 1.33 |
| 926-DS26LS31CM/NOPB   | DS26LS31CM/NOPB            | SOIC-16       | 4                   | -                     | Bipolar | 5                  | 60                          | 0 to 70                    | 1.65       | 1.31 | 1.15 |
| 926-DS26LS32ACM/NOPB  | DS26LS32ACM/NOPB           | SOIC-16       | -                   | 4                     | Bipolar | 5                  | 60                          | 0 to 70                    | 1.61       | 1.30 | 1.17 |
| 926-DS26LV31TM/NOPB   | DS26LV31TM/NOPB            | SOIC-16       | 4                   | -                     | CMOS    | 3.3                | 0.1                         | -40 to 85                  | 1.92       | 1.55 | 1.39 |
| 926-DS26LV32ATM/NOPB  | DS26LV32ATM/NOPB           | SOIC-16       | -                   | 4                     | CMOS    | 3.3                | 15                          | -40 to 85                  | 1.92       | 1.55 | 1.39 |
| 926-DS26LV32ATMX/NOPB | DS26LV32ATMX/NOPB          | SOIC-16       | -                   | 4                     | CMOS    | 3.3                | 15                          | -40 to 85                  | 1.76       | 1.36 | 1.23 |
| 926-DS34C86TM/NOPB    | DS34C86TM/NOPB             | SOIC-16       | -                   | 4                     | CMOS    | 5                  | 23                          | -40 to 85                  | 1.82       | 1.47 | 1.32 |
| 926-DS34C87TM/NOPB    | DS34C87TM/NOPB             | SOIC-16       | 4                   | -                     | CMOS    | 5                  | 0.5                         | -40 to 85                  | 1.55       | 1.25 | 1.12 |
| 926-DS34LV86TM/NOPB   | DS34LV86TM/NOPB            | SOIC-16       | -                   | 4                     | CMOS    | 3.3                | 15                          | -40 to 85                  | 2.57       | 2.07 | 1.86 |
| 926-DS34LV86TM        | DS34LV86TM                 | SOIC-16       | -                   | 4                     | CMOS    | 7                  | 15                          | -40 to 85                  | 2.90       | 2.24 | 2.02 |
| 926-DS34LV87TM/NOPB   | DS34LV87TM/NOPB            | SOIC-16       | 4                   | -                     | CMOS    | 3.3                | 0.1                         | -40 to 85                  | 2.57       | 2.07 | 1.86 |
| 926-DS8921AM/NOPB     | DS8921AM/NOPB              | SOIC-8        | 1                   | 1                     | Bipolar | 5                  | 35                          | -40 to 85                  | 1.72       | 1.37 | 1.20 |
| 926-DS8921N/NOPB      | DS8921N/NOPB               | DIP-8         | 1                   | 1                     | Bipolar | 5                  | 35                          | 0 to 70                    | 1.64       | 1.32 | 1.19 |
| 926-DS8921MX/NOPB     | DS8921MX/NOPB              | SO-8          | 2                   | 2                     | CMOS    | 7                  | 35                          | -40 to 85                  | 1.61       | 1.28 | 1.12 |
| 926-DS8922AM/NOPB     | DS8922AM/NOPB              | SOIC-16       | 2                   | 2                     | Bipolar | 5                  | 76                          | 0 to 70                    | 1.95       | 1.57 | 1.41 |
| 926-DS8923AM/NOPB     | DS8923AM/NOPB              | SOIC-16       | 2                   | 2                     | Bipolar | 5                  | 76                          | 0 to 70                    | 1.68       | 1.35 | 1.22 |
| 926-DS9637ACMX/NOPB   | DS9637ACMX/NOPB            | SOIC-8        | 2                   | 2                     | Bipolar | 5.5                | 50                          | 0 to 70                    | 1.86       | 1.47 | 1.32 |
| 926-DS89C21TM/NOPB    | DS89C21TM/NOPB             | SOIC-8        | 1                   | 1                     | CMOS    | 5                  | 6                           | -40 to 85                  | 1.77       | 1.42 | 1.28 |

## RS-485

| MOUSER STOCK NO.    | National Products Part No. | Package Style | Drivers Per Package | Receivers Per Package | Supply Voltage (V) | Data Rate (Mbps) | I <sub>cc</sub> (Max.) (mA) | Process | Operating Temperature (°C) | Price Each |      |      |
|---------------------|----------------------------|---------------|---------------------|-----------------------|--------------------|------------------|-----------------------------|---------|----------------------------|------------|------|------|
|                     |                            |               |                     |                       |                    |                  |                             |         |                            | 1          | 25   | 100  |
| 926-DS1487M/NOPB    | DS1487M/NOPB               | SOIC-8        | 1                   | 1                     | 5                  | 2                | 0.5                         | CMOS    | 0 to 70                    | 2.08       | 1.67 | 1.50 |
| 926-DS36276M/NOPB   | DS36276M/NOPB              | SOIC-8        | 1                   | 1                     | 5                  | 10               | 60                          | Bipolar | 0 to 70                    | 2.79       | 2.25 | 2.02 |
| 926-DS36277TMX/NOPB | DS36277TMX/NOPB            | SOIC-8        | 1                   | 1                     | 5                  | 1                | 60                          | Bipolar | -40 to 85                  | 1.98       | 1.59 | 1.43 |
| 926-DS3695AM/NOPB   | DS3695AM/NOPB              | SOIC-8        | 1                   | 1                     | 5                  | 10               | 60                          | Bipolar | 0 to 70                    | 1.79       | 1.44 | 1.29 |
| 926-DS3695AMX/NOPB  | DS3695AMX/NOPB             | SOIC-8        | 1                   | 1                     | 5                  | 10               | 60                          | Bipolar | 0 to 70                    | 2.02       | 1.55 | 1.41 |
| 926-DS3695ATM/NOPB  | DS3695ATM/NOPB             | SOIC-8        | 1                   | 1                     | 5                  | 10               | 60                          | Bipolar | -40 to 85                  | 3.06       | 2.46 | 2.21 |
| 926-DS3695N/NOPB    | DS3695N/NOPB               | DIP-8         | 1                   | 1                     | 5                  | 10               | 60                          | Bipolar | 0 to 70                    | 2.10       | 1.69 | 1.52 |
| 926-DS36C278TM/NOPB | DS36C278TM/NOPB            | SOIC-8        | 1                   | 1                     | 5                  | -----            | 0.5                         | CMOS    | 0 to 70                    | 2.51       | 2.02 | 1.82 |
| 926-DS485TM/NOPB    | DS485TM/NOPB               | SOIC-8        | 1                   | 1                     | 5                  | 2.5              | 0.9                         | CMOS    | -40 to 85                  | 1.97       | 1.58 | 1.42 |
| 926-DS75176BM/NOPB  | DS75176BM/NOPB             | SOIC-8        | 1                   | 1                     | 5                  | 10               | 55                          | Bipolar | 0 to 70                    | 1.69       | 1.34 | 1.18 |
| 926-DS75176BMX/NOPB | DS75176BMX/NOPB            | SOIC-8        | 1                   | 1                     | 5                  | 10               | 55                          | Bipolar | 0 to 70                    | 1.83       | 1.44 | 1.30 |
| 926-DS75176BN/NOPB  | DS75176BN/NOPB             | DIP-8         | 1                   | 1                     | 5                  | 10               | 55                          | Bipolar | 0 to 70                    | 1.86       | 1.48 | 1.30 |
| 926-DS75176BTM/NOPB | DS75176BTM/NOPB            | SOIC-8        | 1                   | 1                     | 5                  | 10               | 55                          | Bipolar | -40 to 85                  | 1.33       | 1.06 | .933 |
| 926-DS75176BTN/NOPB | DS75176BTN/NOPB            | DIP-8         | 1                   | 1                     | 5                  | 10               | 55                          | Bipolar | -40 to 85                  | 1.51       | 1.20 | 1.05 |
| 926-DS96176CN/NOPB  | DS96176CN/NOPB             | DIP-8         | 1                   | 1                     | 5                  | 10               | 35                          | Bipolar | 0 to 70                    | 2.91       | 2.35 | 2.11 |

## USB SWITCHES

| MOUSER STOCK NO.    | National Products Part No. | Package Style | Channels | R <sub>ON</sub> (Max.) (Ω) | Output Current (mA) | t <sub>OFF</sub> Time (Typ.) | t <sub>ON</sub> Time (Typ.) | Quiescent Current (mA) | V <sub>CC</sub> |      | Enable Control | Price Each |      |      |
|---------------------|----------------------------|---------------|----------|----------------------------|---------------------|------------------------------|-----------------------------|------------------------|-----------------|------|----------------|------------|------|------|
|                     |                            |               |          |                            |                     |                              |                             |                        | Min.            | Max. |                | 1          | 25   | 100  |
| 926-LM3525M-H/NOPB  | LM3525M-H/NOPB             | SOIC-8        | 1        | 0.08                       | 500                 | 20μs                         | 200μs                       | 0.001                  | 2.7             | 5.5  | Active High    | 1.98       | 1.59 | 1.43 |
| 926-LM3525M-L/NOPB  | LM3525M-L/NOPB             | SOIC-8        | 1        | 0.08                       | 500                 | 20μs                         | 200μs                       | 0.001                  | 2.7             | 5.5  | Active Low     | 1.98       | 1.59 | 1.43 |
| 926-LM3526M-H/NOPB  | LM3526M-H/NOPB             | SOIC-8        | 2        | 0.1                        | 500                 | 5μs                          | 150μs                       | 0.001                  | 2.7             | 5.5  | Active High    | 2.08       | 1.68 | 1.51 |
| 926-LM3526M-L/NOPB  | LM3526M-L/NOPB             | SOIC-8        | 2        | 0.1                        | 500                 | 5μs                          | 150μs                       | 0.001                  | 2.7             | 5.5  | Active Low     | 2.08       | 1.68 | 1.51 |
| 926-LM3526MX-H/NOPB | LM3526MX-H/NOPB            | SOIC-8        | 2        | 0.1                        | 500                 | 5μs                          | 150μs                       | 0.001                  | 2.7             | 5.5  | Active High    | 2.32       | 1.79 | 1.62 |
| 926-LM3526MX-L/NOPB | LM3526MX-L/NOPB            | SOIC-8        | 2        | 0.1                        | 500                 | 5μs                          | 150μs                       | 0.001                  | 2.7             | 5.5  | Active Low     | 2.32       | 1.79 | 1.62 |

## ETHERNET CONTROLLERS

| MOUSER STOCK NO.     | National Products Part No. | Package Style | MAC | PHY | RAM Buffer (bytes) |    | LEDs | Interrupt Pin | Max. Speed (Mbps) | Interface | Pre-Prog MAC Address | Security Engines | Price Each |      |      |
|----------------------|----------------------------|---------------|-----|-----|--------------------|----|------|---------------|-------------------|-----------|----------------------|------------------|------------|------|------|
|                      |                            |               |     |     | Tx                 | Rx |      |               |                   |           |                      |                  | 1          | 25   | 100  |
| 926-DP83816AVNG/NOPB | DP83816AVNG/NOPB           | LQFP-144      | Yes | Yes | 2K                 | 2K | Yes  | Yes           | 100               | PCI Bus   | No                   | No               | 11.65      | 9.55 | 8.62 |

## ETHERNET TRANSCEIVERS

| MOUSER STOCK NO.     | National Products Part No. | Package Style | Function | Data Rate | Ports | Interface    | Supply Voltage (V) | JTAG 11.49.1 | Operating Temperature (°C) | Price Each |       |       |
|----------------------|----------------------------|---------------|----------|-----------|-------|--------------|--------------------|--------------|----------------------------|------------|-------|-------|
|                      |                            |               |          |           |       |              |                    |              |                            | 1          | 25    | 100   |
| 926-DP83640TVV/NOPB  | DP83640TVV/NOPB            | LQFP-48       | PHY      | 10/100    | 1     | MII/RMII     | 3.3                | No           | -40 to 85                  | 12.45      | 10.20 | 9.21  |
| 926-DP83848CVV/NOPB  | DP83848CVV/NOPB            | LQFP-48       | PHY      | 10/100    | 1     | MII/RMII/SNI | 3.3                | Yes          | -40 to 85                  | 6.80       | 5.57  | 5.03  |
| 926-DP83848CVVX/NOPB | DP83848CVVX/NOPB           | LQFP-48       | PHY      | 10/100    | 1     | MII/RMII/SNI | 3.3                | Yes          | -40 to 85                  | 6.80       | 5.57  | 5.03  |
| 926-DP83848HSQ/NOPB  | DP83848HSQ/NOPB            | LLP-40        | PHY      | 10/100    | 1     | MII/RMII     | 3.3                | No           | -40 to 125                 | 26.20      | 22.28 | 20.63 |
| 926-DP83848IVV/NOPB  | DP83848IVV/NOPB            | LQFP-48       | PHY      | 10/100    | 1     | MII/RMII/SNI | 3.3                | Yes          | -40 to 85                  | 7.83       | 6.41  | 5.79  |
| 926-DP83848IVVX/NOPB | DP83848IVVX/NOPB           | LQFP          | PHY      | 10/100    | 1     | MII/RMII/SNI | 3.3                | Yes          | -40 to 85                  | 8.61       | 7.15  | 6.49  |
| 926-DP83848JSQ/NOPB  | DP83848JSQ/NOPB            | LLP-40        | PHY      | 10/100    | 1     | MII/RMII     | 3.3                | No           | 0 to 70                    | 3.84       | 3.13  | 2.81  |
| 926-DP83848KX/NOPB   | DP83848KX/NOPB             | LLP-40        | PHY      | 10/100    | 1     | MII/RMII     | 3.3                | No           | -40 to 85                  | 5.13       | 4.18  | 3.76  |
| 926-DP83848MSQ/NOPB  | DP83848MSQ/NOPB            | LLP-40        | PHY      | 10/100    | 1     | MII/RMII     | 3.3                | No           | 0 to 70                    | 3.84       | 3.13  | 2.81  |

Demo Board Description 926-DP83630-EVK/NOPB DP83630 Ethernet Physical Layer Transceiver Demo Board 132.50 - -