

LED Driver ICs

Switching Converters

| Device | Topology | V _{IN} | | Output Current (mA) | Dimming | Package Options | Demoboards | Application/ Design Notes |
|--|------------------|-----------------|---------|---------------------|--------------|--------------------|---------------------------|--|
| | | min (V) | max (V) | | | | | |
| Automotive (AEC-Q100 Certified) LED Drivers | | | | | | | | |
| AT9917 | Boost, SEPIC | 5.3 | 40 | External FET | PWM / Linear | 24-Lead TSSOP (TS) | --- | --- |
| AT9919 | Buck | 4.5 | 40 | External FET | PWM | 8-Lead DFN (K7) | AT9919DB1 | --- |
| AT9932 | Boost-Buck (Ćuk) | 5.3 | 40 | External FET | PWM / Linear | 24-Lead TSSOP (TS) | --- | --- |
| AT9933 | Boost-Buck (Ćuk) | 9.0 | 75 | External FET | PWM | 8-Lead SOIC (LG) | AT9933DB1 | AN-H51 AN-H58 |

General Purpose LED Drivers

| | | | | | | | | |
|-------------------------|-------------------|-----|-----|----------------|----------------|---|---|--|
| HV9801A | Buck | 15 | 450 | External FET | 4-Level Switch | 8-Lead SOIC (LG) 16-Lead SOIC (NG) | --- | --- |
| HV9861A | Buck | 12 | 450 | External FET | PWM / Linear | 8-Lead SOIC (LG) 16-Lead SOIC (NG) | HV9861ADB1 | --- |
| HV9910B | Buck | 8.0 | 450 | External FET | PWM / Linear | 8-Lead SOIC (LG) 16-Lead SOIC (NG) | HV9910BDB2 HV9910BDB3 HV9910BDB7 HV9910DB6 | AN-H48 AN-H50 AN-H64 DN-H01 |
| HV9918 | Buck | 4.5 | 40 | Integrated FET | PWM | 8-Lead DFN (K7) | HV9918DB1 | --- |
| HV9919B | Buck | 4.5 | 40 | External FET | PWM | 8-Lead DFN (K7) | HV9919BDB1 | --- |
| HV9921 | Buck | 20 | 400 | 20 | No | 3-Lead TO-92 (N3) 3-Lead SOT-89 (N8) | HV9921DB1 | --- |
| HV9922 | Buck | 20 | 400 | 50 | No | 3-Lead TO-92 (N3) 3-Lead SOT-89 (N8) | HV9922DB1 HV9922DB2 | DN-H02 DN-H03 |
| HV9923 | Buck | 20 | 400 | 30 | No | 3-Lead TO-92 (N3) 3-Lead SOT-89 (N8) | HV9923DB1 | --- |
| HV9925 | Buck | 20 | 400 | 20 - 50 | PWM | 8-Lead SOIC (SG) w/ Heat Slug | HV9925DB1 | --- |
| HV9930 | Hysteriac | 8.0 | 200 | External FET | PWM | 8-Lead SOIC (LG) | HV9930DB1 HV9930DB2 | AN-H51 AN-H58 |
| HV9931 | Single-Switch PFC | 8.0 | 450 | External FET | PWM | 8-Lead SOIC (LG) | HV9931DB1v2 HV9931DB2v1 HV9931DB5 | AN-H52 DN-H04 DN-H05 DN-H06 |
| HV9961 | Buck | 8.0 | 450 | External FET | PWM / Linear | 8-Lead SOIC (LG) 16-Lead SOIC (NG) | HV9961DB1 | AN-H64 |
| HV9967B | Buck | 8.0 | 60 | External FET | PWM / Linear | 8-Lead DFN (K7) 8-Lead MSOP (MG) | --- | --- |
| HV9971 | Flyback | - | - | External FET | PWM | 8-Lead SOIC (LG) | HV9971DB1 | --- |

Backlight LED Drivers

| | | | | | | | | |
|-------------------------|-----------------------------|-----|-----|----------------|--------------|---------------------------------------|--|------------------------|
| HV9860 | Boost | 10 | 40 | External FET | PWM | 16-Lead SOIC (NG) | HV9860DB1 | --- |
| HV9861A | Buck | 12 | 450 | External FET | PWM / Linear | 8-Lead SOIC (LG) 16-Lead SOIC (NG) | HV9861ADB1 | --- |
| HV9911 | Boost, SEPIC, Buck-Boost | 9.0 | 250 | External FET | PWM | 16-Lead SOIC (NG) | HV9911DB1v2 HV9911DB2 HV9911DB3 HV9911DB4 | AN-H55 |
| HV9912 | Boost, SEPIC, Buck-Boost | 9.0 | 100 | External FET | PWM | 16-Lead SOIC (NG) | HV9912DB1 | --- |
| HV9957 | Boost | 2.7 | 28 | 30 x 6-Channel | PWM | 24-Lead QFN (K7) | HV9957DB1 | --- |

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|--------------------------------------|--------------------------|-----------------|---------|---------------------|--------------|---------------------------------------|---------------------------|---------------------------|
| | | min (V) | max (V) | | | | | |
| Backlight LED Drivers (cont.) | | | | | | | | |
| HV9961 | Buck | 8.0 | 450 | External FET | PWM / Linear | 8-Lead SOIC (LG) 16-Lead SOIC (NG) | HV9961DB1 | AN-H64 |
| HV9963 | Boost, SEPIC, Buck-Boost | 8.0 | 40 | External FET | PWM / Linear | 16-Lead SOIC (NG) | --- | --- |
| HV9967B | Buck | 8.0 | 60 | External FET | PWM / Linear | 8-Lead DFN (K7) 8-Lead MSOP (MG) | --- | --- |
| HV9980 | Buck | 100 | 160 | 70 | PWM / Linear | 24-Lead SOW (WG) | HV9980DB1 | --- |
| HV9982 | Boost, SEPIC | 10 | 40 | External FET | PWM / Linear | 40-Lead QFN (K6) | HV9982DB1 | --- |
| HV9985 | Boost, SEPIC | 10 | 40 | External FET | PWM / Linear | 40-Lead QFN (K6) 44-Lead QSOP (QP) | HV9985DB1 | --- |
| HV9986 | Boost, SEPIC | 10 | 40 | External FET | PWM / Linear | 40-Lead QFN (K6) | --- | --- |
| HV9989 | Boost, SEPIC | 10 | 40 | External FET | PWM / Linear | 40-Lead QFN (K6) | --- | --- |

Offline PFC

| | | | | | | | | |
|------------------------|--------------|-----|-----|--------------|-----|------------------|---|--|
| HV9931 | Buck, BIBRED | 8.0 | 450 | External FET | PWM | 8-Lead SOIC (LG) | HV9931DB1v2 HV9931DB2v1 HV9931DB5 | AN-H52 DN-H04 DN-H05 DN-H06 |
|------------------------|--------------|-----|-----|--------------|-----|------------------|---|--|

Linear Regulators

| Device | V _{IN} | | V _{OUT} | | Output Current (mA) | Dimming | Parallelable | Package Options | Features |
|-----------------------|-----------------|---------|------------------|---------|---------------------|--------------|--------------|---|----------------------------------|
| | min (V) | max (V) | min (V) | max (V) | | | | | |
| CL2 | 5.0 | 90 | 5.0 | 90 | 20 | External FET | Yes | 3-Lead TO-252 (K4) 3-Lead TO-92 (N3) 3-Lead SOT-89 (N8) | --- |
| CL25 | 5.0 | 90 | 5.0 | 90 | 25 | External FET | Yes | 3-Lead TO-92 (N3) 3-Lead SOT-89 (N8) | --- |
| CL220 | 5.0 | 220 | 5.0 | 220 | 20 | External FET | Yes | 3-Lead TO-252 (K4) 3-Lead TO-220 (N5) | --- |
| CL320 | 6.5 | 90 | 4.0 | 90 | 20 | PWM | Yes | 8-Lead SOIC (SG) w/ Heat Slug | OTP, separate ENABLE pin |
| CL325 | 6.5 | 90 | 4.0 | 90 | 25 | PWM | Yes | 8-Lead SOIC (SG) w/ Heat Slug | OTP, separate ENABLE pin |
| CL330 | 6.5 | 90 | 4.0 | 90 | 30 | PWM | Yes | 8-Lead SOIC (SG) w/ Heat Slug | OTP, separate ENABLE pin |
| CL520 | 4.75 | 90 | 1.0 | 90 | 20 | - | Yes | 3-Lead TO-252 (K4) 3-Lead TO-92 (N3) | --- |
| CL525 | 4.75 | 90 | 1.0 | 90 | 25 | - | Yes | 3-Lead TO-252 (K4) 3-Lead TO-92 (N3) | --- |
| CL6 | 6.5 | 90 | 4.0 | 90 | 100 | No | Yes | 3-Lead TO-252 (K4) 3-Lead TO-220 (N5) | Reverse polarity protection, OTP |
| CL7 | 6.5 | 90 | 4.0 | 90 | 100 | PWM | Yes | 8-Lead SOIC (SG) w/ Heat Slug | Reverse polarity protection, OTP |