

**PULSE-WIDTH-MODULATION CONTROL CIRCUITS****AZ494B/D****Description**

The AZ494B/D is a voltage mode pulse width modulation switching regulator control circuit designed primarily for power supply control. The AZ494B/D consists of a reference voltage circuit, two error amplifiers, an on-chip adjustable oscillator, a dead-time control (DTC) comparator, a pulse-steering control flip-flop, and an output control circuit. The precision of voltage reference (V_{REF}) is improved up to $\pm 1.5\%$ through trimming and this provides a better output voltage regulation. The AZ494B/D provides for push-pull or single-ended output operation, which can be selected through the output control.

Features

- Stable 4.95V/5V Reference Voltage Trimmed to $\pm 1.5\%$ Accuracy
- Uncommitted Output TR for 200mA Sink or Source Current
- Single-End or Push-Pull Operation Selected by Output Control
- Internal Circuitry Prohibits Double Pulse at Either Output
- Complete PWM Control Circuit with Variable Duty Cycle
- On-Chip Oscillator With Master or Slave Operation

Applications

- SMPS
- Back Light Inverter
- Charger

Parametric Table

| | | |
|--|---------|---------|
| Reference Voltage (V) | AZ494B | 4.95 |
| | AZ494D | 5 |
| Reference Voltage Tolerance | | 1.5% |
| Frequency Change with Temperature (Max) | | 1% |
| Open Loop Voltage Gain (db) | | 95 |
| Unity-Gain Bandwidth (KHz) | | 800 |
| Output Saturation Voltage (Common Emitter) (V) | | 1.1 |
| Rise Time (ns) | | 100 |
| Fall Time (ns) | | 25 |
| Supply Voltage (V) | | 7 to 36 |
| Package | DIP-16 | |
| | SOIC-16 | |

Benefits

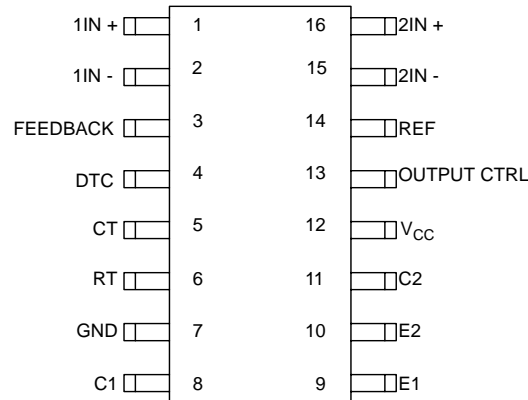
- Very competitive price

Additional Available Materials

- Samples
- Data Sheet
- Reliability Report
- ESD Report
- Application Notes
- Demo Board

**PULSE-WIDTH-MODULATION CONTROL CIRCUITS****AZ494B/D****Pin Configuration**

SOIC-16 / DIP-16

**Ordering Information**

| Package | Temperature Range | Part Number | | Marking ID | | Packing Type |
|---------|-------------------|-------------|--------------|------------|------------|--------------|
| | | Tin Lead | Lead Free | Tin Lead | Lead Free | |
| SOIC-16 | -40 to 85°C | AZ494BM | AZ494BM-E1 | AZ494BM | AZ494BM-E1 | Tube |
| | | AZ494BMTR | AZ494BMTR-E1 | AZ494BM | AZ494BM-E1 | Tape & Reel |
| | | AZ494DM | AZ494DM-E1 | AZ494DM | AZ494DM-E1 | Tube |
| | | AZ494DMTR | AZ494DMTR-E1 | AZ494DM | AZ494DM-E1 | Tape & Reel |
| DIP-16 | | AZ494BP | AZ494BP-E1 | AZ494BP | AZ494BP-E1 | Tube |
| | | AZ494DP | AZ494DP-E1 | AZ494DP | AZ494DP-E1 | Tube |

Detailed information please refer to the relevant datasheet.

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