



**PULSE-WIDTH-MODULATION CONTROL CIRCUITS**

**AZ494A/C**

**Description**

The AZ494A/C is a voltage mode pulse width modulation switching regulator control circuit designed primarily for power supply control. The AZ494A/C 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  $\pm 1\%$  through trimming and this provides a better output voltage regulation. The AZ494A/C 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  $\pm 1.0\%$  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)	AZ494A	4.95
	AZ494C	5
Reference Voltage Tolerance		1%
Frequency Change with Temperature (Max)		1%
Open Loop Voltage Gain (db)		95
Unity-Gain Bandwidth (KHz)		650
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**

- Higher Power Glitch Rejection
- Very competitive price

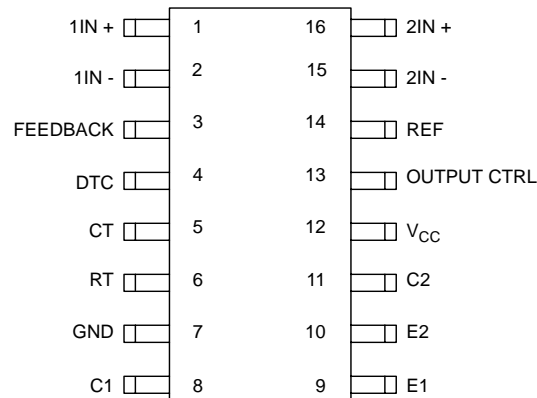
**Additional Available Materials**

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



**PULSE-WIDTH-MODULATION CONTROL CIRCUITS****AZ494A/C****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	AZ494AM	AZ494AM-E1	AZ494AM	AZ494AM-E1	Tube
		AZ494AMTR	AZ494AMTR-E1	AZ494AM	AZ494AM-E1	Tape & Reel
		AZ494CM	AZ494CM-E1	AZ494CM	AZ494CM-E1	Tube
		AZ494CMTR	AZ494CMTR-E1	AZ494CM	AZ494CM-E1	Tape & Reel
DIP-16		AZ494AP	AZ494AP-E1	AZ494AP	AZ494AP-E1	Tube
		AZ494CP	AZ494CP-E1	AZ494CP	AZ494CP-E1	Tube

Detailed information please refer to the relevant datasheet.

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