



RAMBUS™ CLOCK LINE TERMINATION NETWORK

Features

- All external components required for Rambus™ Clock Line Termination
- Operation to 400 MHz
- Meets Direct Rambus™ specifications

Application

- Direct Rambus™ Memory Systems

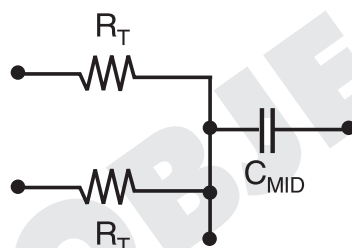
Product Description

The PAC™ RAMBUS-3 provides all the passive components that are required to terminate the end of the clock signal lines in a Direct Rambus™ memory subsystem. With clock signal speeds up to 400 MHz, it is imperative that the clock lines be properly terminated to assure proper operation and avoid signal integrity problems. The PAC RAMBUS-3 performs this termination function with parallel termination resistors and a capacitor for the AC ground path.

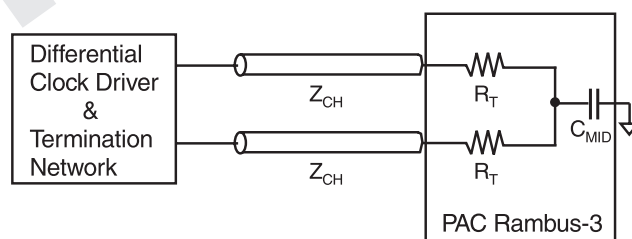
Application Information

The nominal value of the transmission line channel impedance, Z_{CH} , is expected to be 27 ohms for a Rambus memory subsystem. To minimize reflections from the end of the clock channel, the effective load impedance must match the channel's characteristic impedance. To accomplish this, a termination resistor, R_T of 27 ohms, is placed at the end of each clock line. In addition, the capacitor C_{MID} is used to provide an AC ground path for the termination resistors.

Product Diagram



Application Diagram



Standard Values

Symbol	Parameter	Value	Tolerance	UNIT
R_T	Termination Resistor	27	+/- 1%	ohms
C_{MID}	AC Ground Path Capacitor	100	+/-20%	pF