

SONET/SDT/ATM S3026 Example

The S3026 Clock Recovery Unit (CRU) contains a stand-alone CRU PLL. The CAP1/CAP2 pins should be connected to a 1.0 μF in series with two resistors (see Table 1). Figure 1 illustrates the connections for the S3026 CRU device. The ground ring is shown around the loop filter capacitor. The ring should be attached to pin 19 (AGND) and brought to minimum metal spacing distance to pins 16 and 17. Please note that the ring should be directly connected to the ground plane as close as possible to pin 19 to avoid current through the ground ring. The values of the decoupling capacitors are 0.1 μF paralleled with 100 pF as shown below. The inductors are Ferrite bead inductors which are Murata BLM31B601SPB or equivalent inductors.

Figure 1. Decoupling Layout

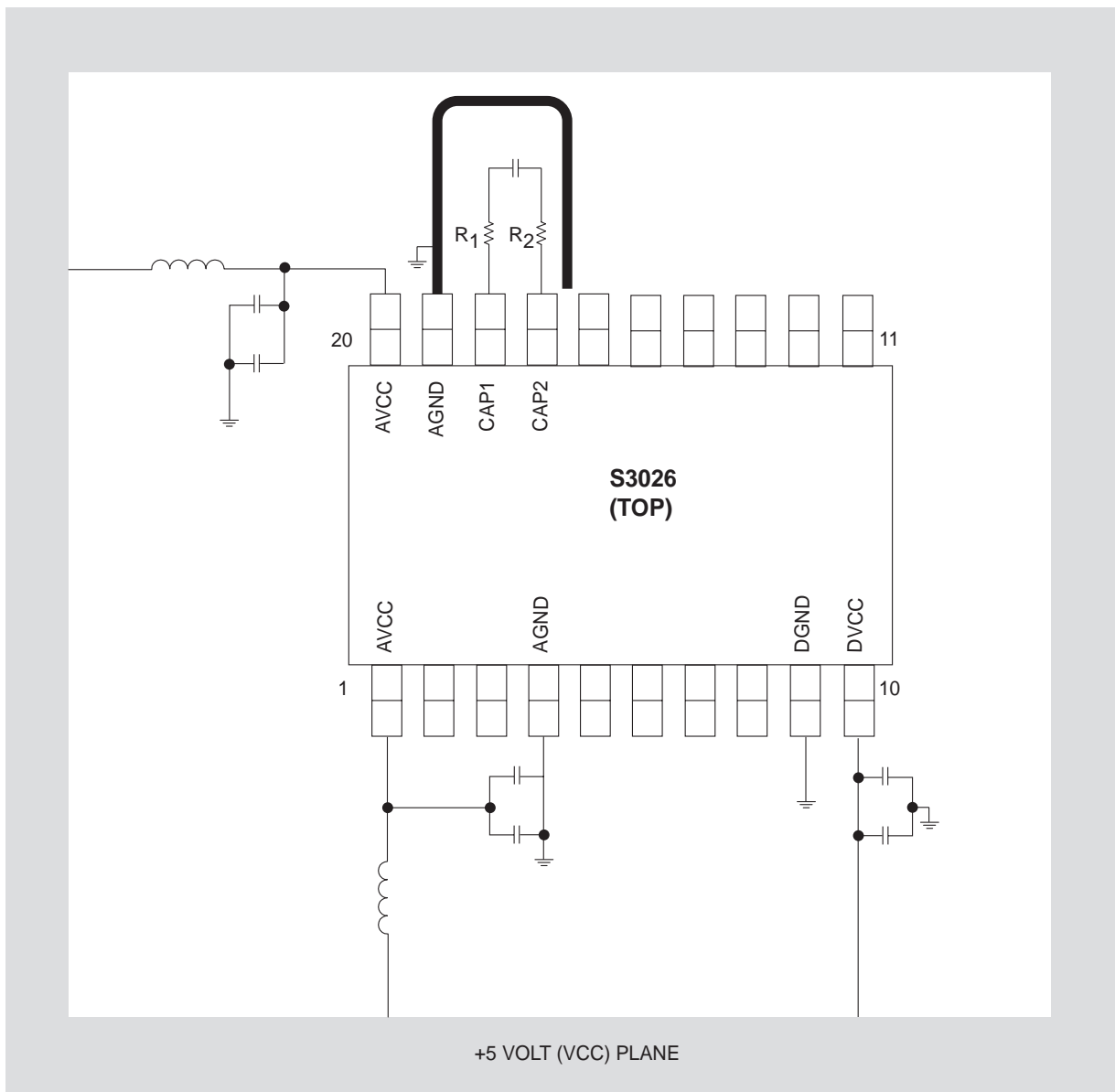


Table 1. Resistor Values

Device	R ₁	R ₂	Units	Condition
S3026A-1	84	84	Ω	155.52 Mbps
S3026A	68	68	Ω	622.08 Mbps



Applied Micro Circuits Corporation • 6290 Sequence Dr., San Diego, CA 92121

Phone: (858) 450-9333 • (800) 755-2622 • Fax: (858) 450-9885

<http://www.amcc.com>

AMCC reserves the right to make changes to its products or to discontinue any semiconductor product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AMCC does not assume any liability arising out of the application or use of any product or circuit described herein, neither does it convey any license under its patent rights nor the rights of others.

AMCC reserves the right to ship devices of higher grade in place of those of lower grade.

AMCC SEMICONDUCTOR PRODUCTS ARE NOT DESIGNED, INTENDED, AUTHORIZED, OR WARRANTED TO BE SUITABLE FOR USE IN LIFE-SUPPORT APPLICATIONS, DEVICES OR SYSTEMS OR OTHER CRITICAL APPLICATIONS.

AMCC is a registered trademark of Applied Micro Circuits Corporation.
Copyright © 1999 Applied Micro Circuits Corporation