Using the QFN16-DIP-EVM evaluation module

This user's guide contains support documentation for the QFN16-DIP-EVM evaluation module (EVM). Included is a step-by-step guide on using the EVM.

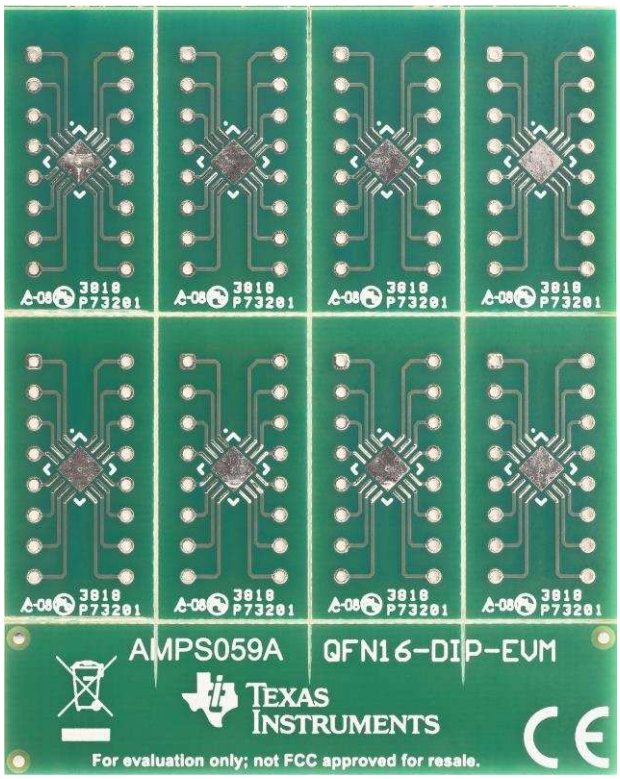

Figure 1. QFN16-DIP-EVM

Contents

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1 Introduction

The QFN16-DIP-EVM is designed to facilitate evaluation of TI quad operational amplifiers (op amps) offered in the RUM-16 package. This EVM routes each pin of the device to a header pin and can be used as a basic building block for circuit design and device testing purposes. The EVM has 8 individual adapter boards available.

2 Hardware Setup

The QFN16-DIP-EVM setup simply requires breaking out one or more PCB from the EVM, then soldering the IC(s) and terminal strips onto the EVM. This section presents the details of these procedures.

2.1 EVM Assembly Instructions

The following are step-by-step instructions on how to assemble the EVM.

1. Gently flex the PCB panel at the score lines to separate the adapter boards from the EVM.

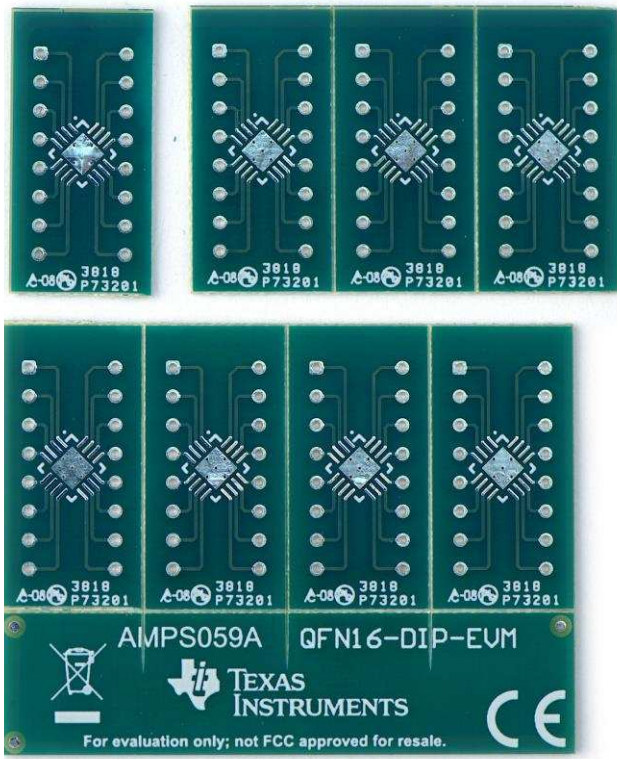

Figure 2.

2. Solder the device on to the PCB. Hot air or infrared reflow may be used.

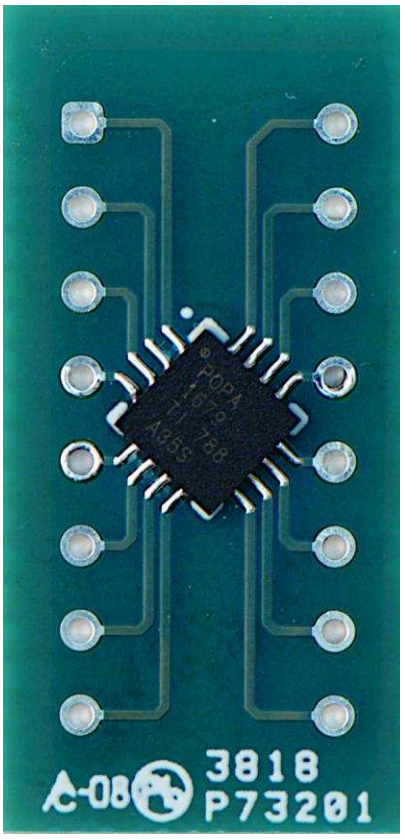

Figure 3.

3. If needed solder bridge one or more pins on the bottom to the plane that is connected to the IC thermal pad. A small piece of wire helps with the connection. Be sure to allow for the terminal strip mounting.

Figure 4.

4. Use long-nose pliers to snap terminal header strips into 8 position lengths. Insert header strips into a DIP socket.

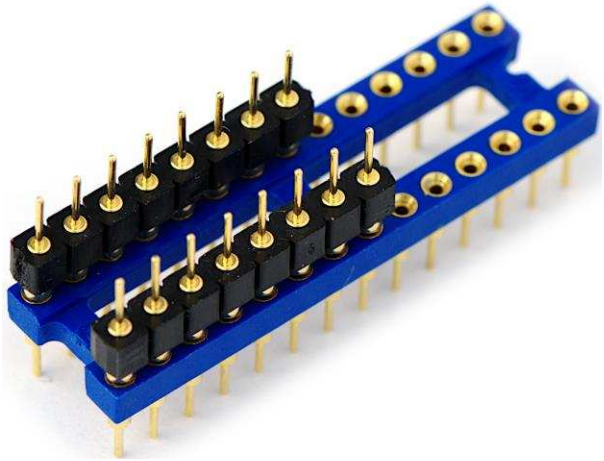

Figure 5.

5. Position the separated PCB over the terminal strips and solder each pin. Carefully remove the PCB from the DIP socket. For best performance, thoroughly clean any solder flux from the PCB and bake at 85°C for 30 minutes.

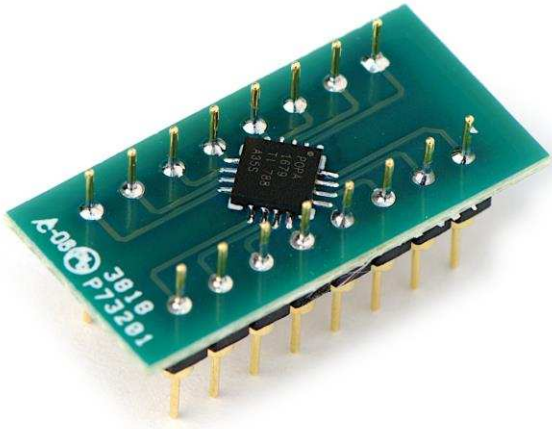

Figure 6.

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