UM11606

TEA2017DK1002 programming kit quick start guide

Rev. 1 — 20 April 2021 User manual

Document information

Information	Content
Keywords	TEA2017AATdev, TEA2017DK1002, programming kit, quick start guide
Abstract	This quick start guide describes how to get started with the TEA2017DK1002 programming kit.

Revision history

Rev	Date	Description
v.1	20210420	Initial version

1 Introduction

Congratulations on your new TEA2017DK1002 programming kit from NXP Semiconductors, showcasing our TEA2017AATdev PFC + LLC controller IC and programming board. The TEA2017AAT offers the leading solution for (computing, All-In-One, gaming, 4K/8K LED TVs, LED lighting, and so on) power supplies. The high level of integration of the IC allows easy design of a compact size, highly efficient, and reliable power supply with a very low number of external components. A power supply using the TEA2017AAT provides a very low no-load input power (< 75 mW; total system including the TEA2017/TEA2095 combination) and high efficiency from minimum to maximum load.

Included in the box are TEA2017AATdev samples and a TEA20xx_Socket_DB1586 programming board. The guide further contains a link to product pages, user manuals, data sheets, application notes, and brochures. The interface is also suitable for using TEA2017AATdev samples.

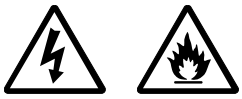
To find out more, check out the TEA2017 product information page and learn more about the complete range of GreenChip solutions on the NXP website: https://www.nxp.com/products/power-management/ac-dc-solutions.

Best regards,

The NXP Smart Power Team

WARNING

Lethal voltage and fire ignition hazard



The non-insulated high voltages that are present when operating this product, constitute a risk of electric shock, personal injury, death and/or ignition of fire. This product is intended for evaluation purposes only. It shall be operated in a designated test area by personnel qualified according to local requirements and labor laws to work with non-insulated mains voltages and high-voltage circuits. This product shall never be operated unattended.

This product has not undergone formal EU EMC assessment. As a component used in a research environment, it is not intended for use in a finished product. If used, it is the responsibility of the user to ensure that the finished assembly does not cause undue interference when used. The product cannot be CE marked unless assessed.

1.1 Kit content

TEA20xx_SOCKET_DB1586: TEA2017 programming board (SO16 socket):

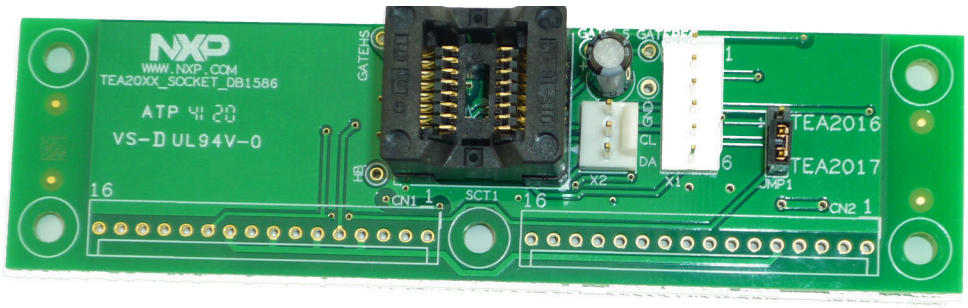


Figure 1. TEA20xx_SOCKET_DB1586: TEA2017 programming board (SO16 socket)

20 ICs TEA2017AATdev:

Figure 2. 20 ICs TEA2017AATdev

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2 Development kit quick start guide

Type: TEA2017DK1002
GreenChip TEA2017AATdev samples and TEA20xx_Socket_DB1586 programming board.

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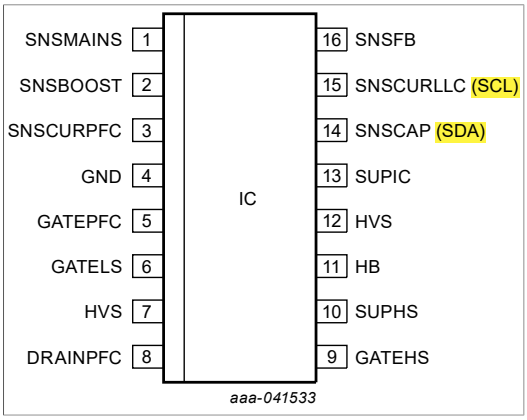
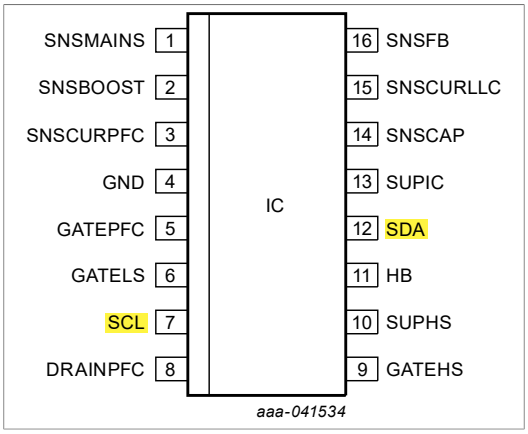


a. Normal version TEA2017AAT

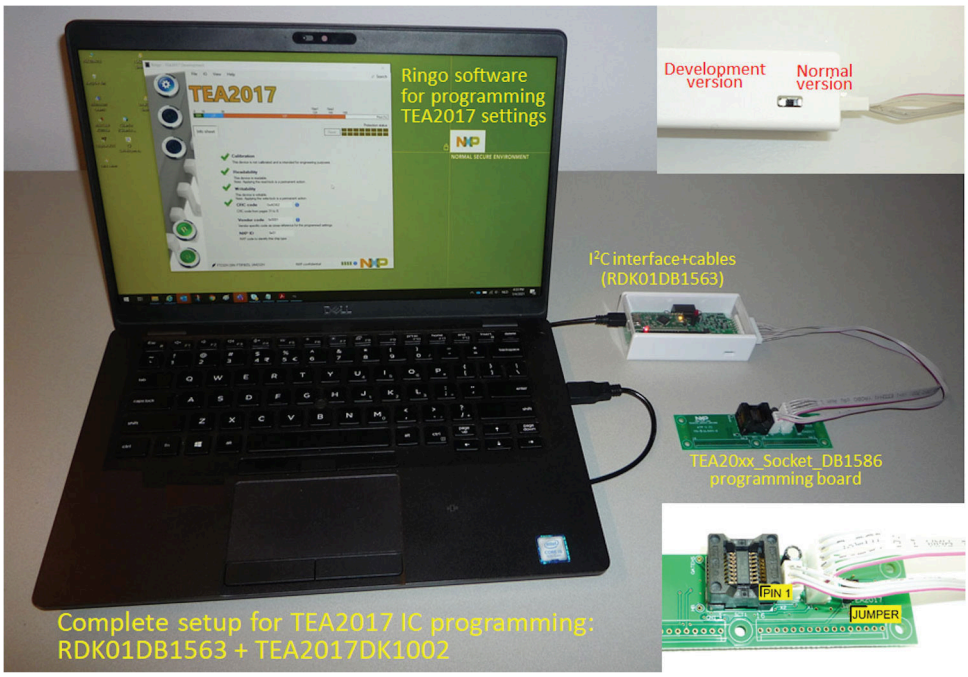


b. Development version TEA2017AATdev

The high-voltages spacer (HVS) pins of the TEA2017AATdev (development) samples are used for I^2C communication. It enables I^2C communication with the TEA2017 in a live operating application.

The TEA2017AAT and the TEA2017AATdev samples can be programmed using the TEA20xx_Socket_DB1586 board and the I^2C interface (RDK01DB1563). Before programming the TEA2017AAT or the TEA2017AATdev samples, the selector switch on the I^2C interface must be set in the right position.

The TEA20xx_Socket_DB1586 board also contains a jumper to enable programming of TEA2016 samples.



Note: *The latest updates and information for the TEA2017 can be found on the NXP website:* https://www.nxp.com.

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