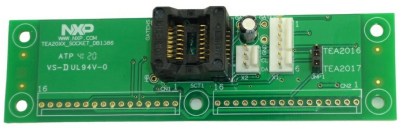
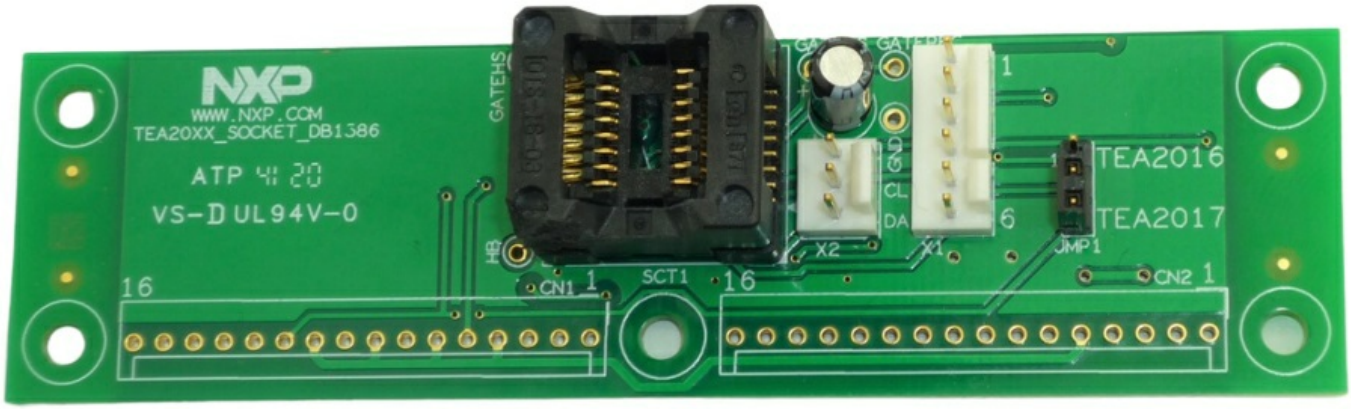


NXP TEA2017DK1007 Development Programming Board User Guide

NXP TEA2017DK1007 Development Programming Board



Contents

1 Dear valued customer,
2 The development kit contains:
3 Development kit quick start guide:
4 Customer Support
5 Documents / Resources
6 Related Posts

Dear valued customer,

Congratulations on your new TEA2017DK1007 programming kit from NXP Semiconductors, showcasing our TEA2017AAT/3dev PFC + LLC controller IC and programming board. The TEA2017AAT/3 is similar to the TEA2017AAT/2, but with improved driver performance and faster start-up behaviour to comply with the latest Intel ATX 3 specification (§4.3 in Intel ATX Version 3.0 spec → T1: Power-on time).
The TEA2017AAT/3 offers the leading solution for (server, computing, All-In-One, gaming, 4K/8K LED TV, etc.) power supplies. The IC's high level of integration allows easy design of a compact size, highly efficient and

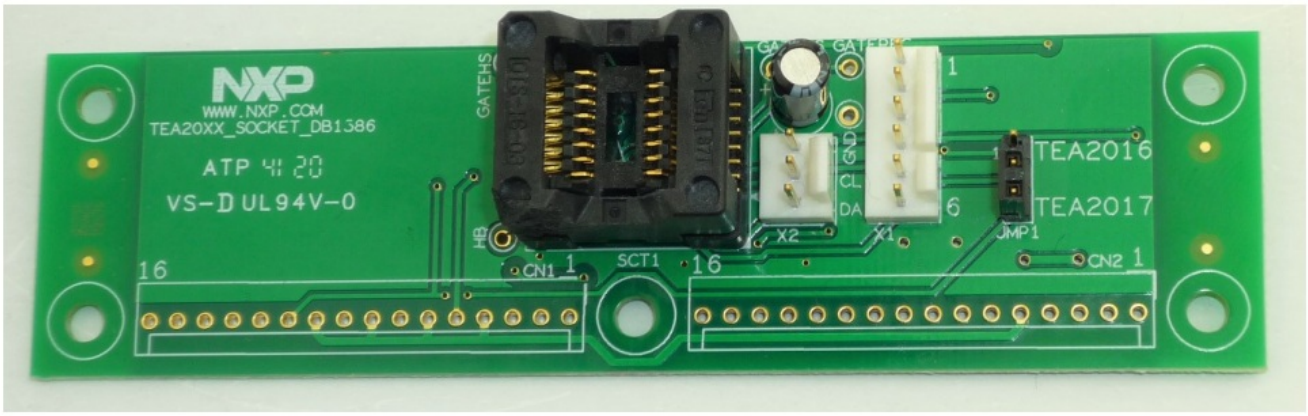
reliable power supply with a very low number of external components. A power supply using the TEA2017AAT/3 provides a very low no-load input power (< 75 mW; total system including the TEA2017 / TEA2095 combination) and high efficiency from minimum to maximum load.

Included in the box are TEA2017AAT/3dev samples and a TEA20xx_Socket_DB1586 programming board.
The guide further contains a link to product pages, user manuals, datasheets, application notes and brochures.

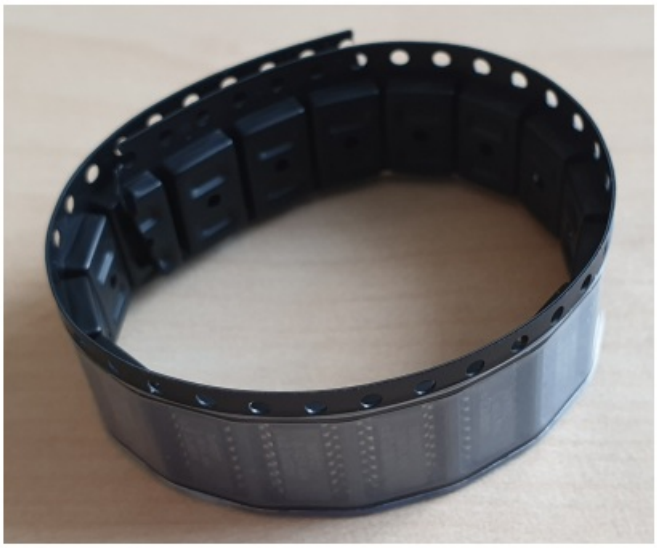
To find out more, check out the TEA2017 product information page and learn more about the complete range of Green Chip solutions on the NXP website: **https://www.nxp.com/products/power-management/ac-dc-solutions** Best Regards,
The NXP Smart Power Team.

The development kit contains:

1. TEA20xx_SOCKET_DB1586: TEA2017 Programming board (SO16 socket)



2. 20 IC's TEA2017AAT/3dev.



WARNING: Lethal voltage and fire ignition hazard – The unshielded 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 that is qualified according to local requirements and labour laws to work with unshielded mains voltages and high-voltage circuits. This product shall never be operated unattended.

Disclaimer: Evaluation products — 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 will be the

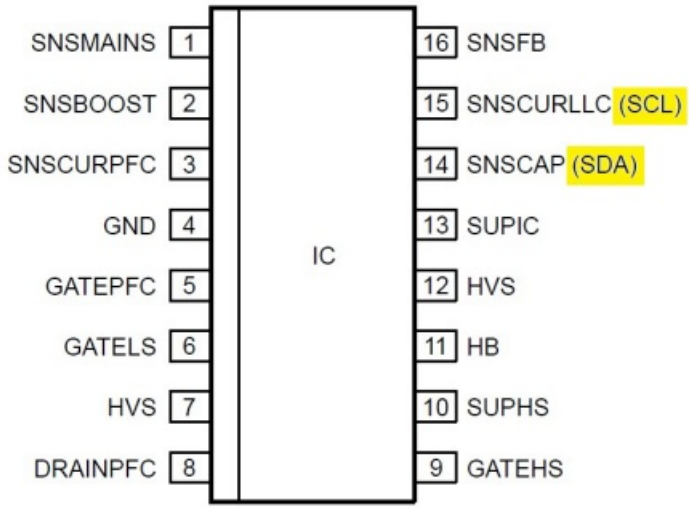
responsibility of the user to ensure the finished assembly does not cause undue interference when used and cannot be CE marked unless assessed. This product is provided on an “as is” and “with all faults” basis for evaluation purposes only. NXP Semiconductors, its affiliates and their suppliers expressly disclaim all warranties, whether express, implied or statutory, including but not limited to the implied warranties of non-infringement, merchantability and fitness for a particular purpose. The entire risk as to the quality, or arising out of the use or performance, of this product remains with customer.
In no event shall NXP Semiconductors, its affiliates or their suppliers be liable to customer for any special, indirect, consequential, punitive or incidental damages (including without limitation damages for loss of business, business interruption, loss of use, loss of data or information, and the like) arising out the use of or inability to use the product, whether or not based on tort (including negligence), strict liability, breach of contract, breach of warranty or any other theory, even if advised of the possibility of such damages.
Notwithstanding any damages that customer might incur for any reason whatsoever (including without limitation, all damages referenced above and all direct or general damages), the entire liability of NXP Semiconductors, its affiliates and their suppliers and customer’s exclusive remedy for all of the foregoing shall be limited to actual damages incurred by customer based on reasonable reliance up to the greater of the amount actually paid by customer for the product or five dollars (US$5.00). The foregoing limitations, exclusions and disclaimers shall apply to the maximum extent permitted by applicable law, even if any remedy fails of its essential purpose.

Disclaimer: Safety – The unshielded 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 that is qualified according to local requirements and labour laws to work with unshielded mains voltages and high-voltage circuits.
The product does not comply with IEC 60950 based national or regional safety standards. NXP does not accept any liability for damages incurred due to inappropriate use of this product or related to the unshielded high voltages. Any use of this product is at customers own risk and liability.
The customer shall fully indemnify and hold harmless NXP from any liability, damages claims resulting from the use of the product.

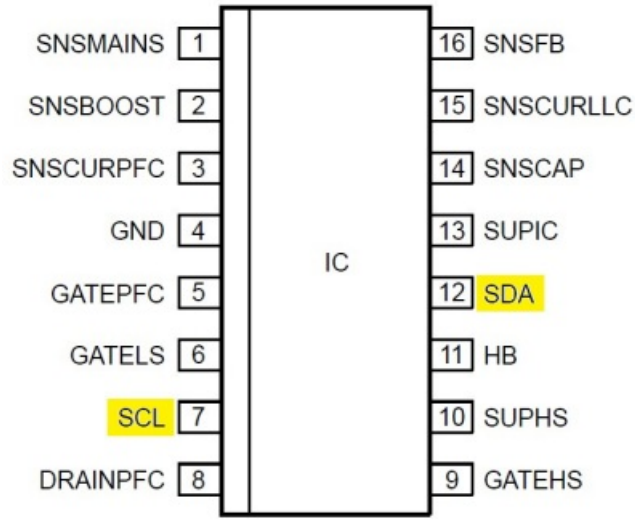
Development kit quick start guide:

Type: TEA2017DK1007 GreenChip TEA2017AAT/3dev samples and TEA20xx_Socket_DB1586 programming board.

12nc: 9354 542 82598

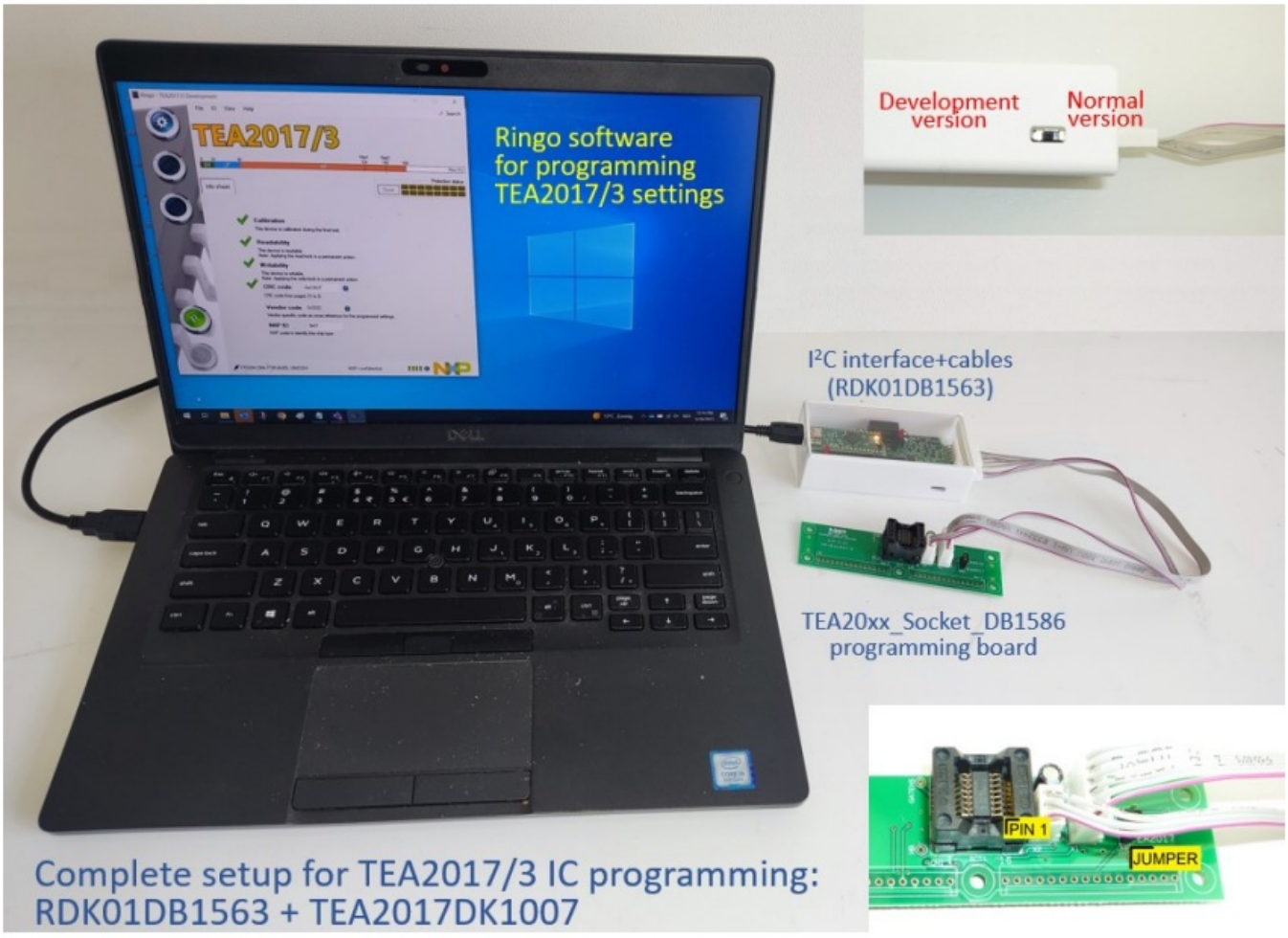


a). Normal version: TEA2017AAT/3



b). Development version: TEA2017AAT/3

The High Voltages Spacer (HVS) pin of the TEA2017AAT/3dev (development) samples are used for I2C communication. This enables I2C communication with the TEA2017 in a live application.
Both TEA2017AAT/3 and TEA2017AAT/3dev samples can be programmed by means of the TEA20xx_Socket_DB1586 board + I2C interface (RDK01DB1563). The selector switch on the I2C interface must be set in the correct position prior to programming TEA2017AAT/3 or TEA2017AAT/3dev samples. The TEA2017AAT/3 and TEA2017AAT/2 have different programming software, so the TEA2017/3 Ringo GUI should be used. The TEA20xx_Socket_DB1586 board also contains a jumper to enable programming of TEA2016 samples.



Note: The latest updates and info for the TEA2017 can be found on the NXP website:
https://www.nxp.com/products/power-management/ac-dc-solutions/ac-dc-controllers-withintegrated-pfc

Customer Support

NXP Semiconductors, Gerstweg 2,
6534AE Nijmegen, The Netherlands
www.nxp.com

Documents / Resources

	**NXP TEA2017DK1007 Development Programming Board** [pdf] User Guide TEA2017AAT-3dev, TEA2017AAT-3, TEA2017DK1007, Development Programming Board, TEA 2017DK1007 Development Programming Board, Programming Board, Board