

Product:	ETKT1.1	Rev :	04	Page 1 of 10
Title :	Change Information			

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File :	ETKT1.1_Change_Information_V04.doc			
TTNR :	ETKT1.1-A F-00K-104-378 ETKT1.1-B F-00K-104-377 ETKT1.1-C F-00K-104-663 ETKT1.1-D F-00K-106-563			
Comments :	Currently shipped: 22B010 FPGA version: V2.2 Hardware-state: B010			
Created:	Name Mai	Department MCD/PRM-H	Signature Mai	Date 2010-12-10
Released:	Name Meerwein	Department EPH1	Signature Meerwein	Date 2010-12-11

Changes

Revision	Description	Date	Name	Signature
01	21A010 - initial Version	2005-10-05	Mai	Mai
02	21A010 – HW Revision ETKT1.1-C added [chapter 2.2.3]	2008-02-13	Mai	Mai
03	21A010 – HW Revision ETKT1.1-D added [chapter 2.2.4]	2009-03-04	Mai	Mai
04	22B010 – Change to RoHS conform hardware [chapter 4]	2010-12-10	Mai	Mai

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1 General remarks to this document

This document consists of three main parts.

Chapter 2 contains general information about the required tool-chain to use this ETK.

Two different items are described.

- Explanation of the version-system of the ETKT1.1
- The required versions of software (INCA / ASCET) , HSP (calibration hardware firmware of e.g. ES690, ES1232, ..) and ETK - hardware.

Additionally other requirements for running the ETK.

Chapter 3 contains information about PLD-Code changes concerning this ETK

Chapter 4 contains information about hardware changes concerning this ETK

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2 Tool-Chain Information

2.1 Version-Syntax of the ETKT1.1

The ETKT1.1 version information is located on the sticker of the ETK or can be read out of the ETK using the ETK-Configuration Tool.

The version information has the following syntax: **aacddd/ee**

PLD-Code Information:

aa: FPGA-Code version (10, 11, 12,...) see chapter 3

Hardware-Information:

c : PCB version (A, B, C, ...)

ddd: Hardware state of the PCB (010, 011, 012, ...) see chapter 4

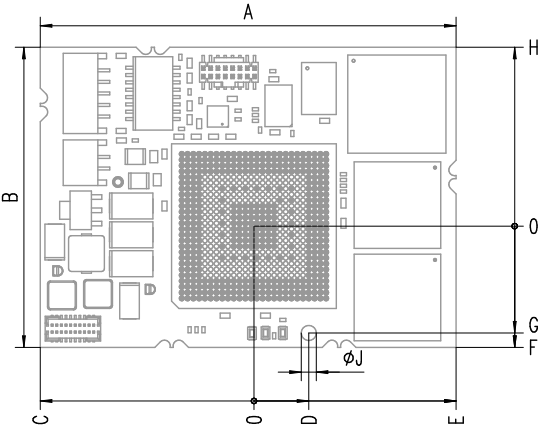
ee: Assembly variant of the PCB (00, 01, 02, ...)

The first delivered hardware state of the ETKT1.1 was **21A010**.

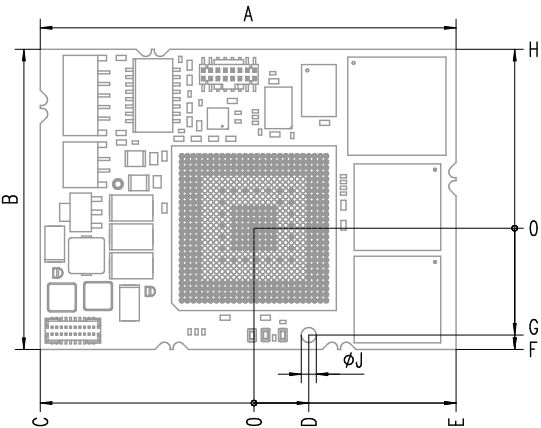
2.2 Product Variants

In general the ETK-T1.1 can be purchased in four variants. The electrical and system functionality differs a bit in the all variants (ECU Adapter and BDF support).

2.2.1 ETK-T1.1A

Item number	F-00K-104-378																														
Description	Emulator probe with 441 pin adapter for a TC1792, TC1796 or TC1797 ECU																														
For details refer to datasheet	 <table border="1" data-bbox="1114 790 1433 1167"> <thead> <tr> <th>DIM</th> <th>MILLIMETERS</th> <th>INCHES</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>72.00</td> <td>2.835</td> </tr> <tr> <td>B</td> <td>52.00</td> <td>2.047</td> </tr> <tr> <td>C</td> <td>37.00</td> <td>1.457</td> </tr> <tr> <td>D</td> <td>9.50</td> <td>0.374</td> </tr> <tr> <td>E</td> <td>35.00</td> <td>1.378</td> </tr> <tr> <td>F</td> <td>21.00</td> <td>0.827</td> </tr> <tr> <td>G</td> <td>18.50</td> <td>0.728</td> </tr> <tr> <td>H</td> <td>31.00</td> <td>1.220</td> </tr> <tr> <td>J</td> <td>2.60</td> <td>0.102</td> </tr> </tbody> </table>	DIM	MILLIMETERS	INCHES	A	72.00	2.835	B	52.00	2.047	C	37.00	1.457	D	9.50	0.374	E	35.00	1.378	F	21.00	0.827	G	18.50	0.728	H	31.00	1.220	J	2.60	0.102
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J	2.60	0.102																													

2.2.2 ETK-T1.1B

Item number	F-00K-104-377																														
Description	Emulator probe with 416 pin adapter for a TC1792, TC1796 or TC1797 ECU																														
For details refer to datasheet	 <table border="1" data-bbox="1114 1545 1433 1921"> <thead> <tr> <th>DIM</th> <th>MILLIMETERS</th> <th>INCHES</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>72.00</td> <td>2.835</td> </tr> <tr> <td>B</td> <td>52.00</td> <td>2.047</td> </tr> <tr> <td>C</td> <td>37.00</td> <td>1.457</td> </tr> <tr> <td>D</td> <td>9.50</td> <td>0.374</td> </tr> <tr> <td>E</td> <td>35.00</td> <td>1.378</td> </tr> <tr> <td>F</td> <td>21.00</td> <td>0.827</td> </tr> <tr> <td>G</td> <td>18.50</td> <td>0.728</td> </tr> <tr> <td>H</td> <td>31.00</td> <td>1.220</td> </tr> <tr> <td>J</td> <td>2.60</td> <td>0.102</td> </tr> </tbody> </table>	DIM	MILLIMETERS	INCHES	A	72.00	2.835	B	52.00	2.047	C	37.00	1.457	D	9.50	0.374	E	35.00	1.378	F	21.00	0.827	G	18.50	0.728	H	31.00	1.220	J	2.60	0.102
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J	2.60	0.102																													

2.2.3 ETK-T1.1C

Item number	F-00K-104-663																																
Description	Emulator probe with 441 pin adapter and a populated TC1792* or TC1796* instead of a socket																																
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* microcontroller needs to be provided by the customer

2.2.4 ETK-T1.1D

Item number	F-00K-106-563																																
Description	Emulator probe with 441 pin adapter and a populated TC1797* instead of a socket																																
For details refer to datasheet		<table border="1"> <thead> <tr> <th>DIM</th> <th>MILLIMETERS</th> <th>INCHES</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>72.00</td> <td>2.835</td> </tr> <tr> <td>B</td> <td>52.00</td> <td>2.047</td> </tr> <tr> <td>C</td> <td>37.00</td> <td>1.457</td> </tr> <tr> <td>D</td> <td>9.50</td> <td>0.374</td> </tr> <tr> <td>E</td> <td>35.00</td> <td>1.378</td> </tr> <tr> <td>F</td> <td>21.00</td> <td>0.827</td> </tr> <tr> <td>G</td> <td>18.50</td> <td>0.728</td> </tr> <tr> <td>H</td> <td>31.00</td> <td>1.220</td> </tr> <tr> <td>J</td> <td>2.60</td> <td>0.102</td> </tr> </tbody> </table>	DIM	MILLIMETERS	INCHES	A	72.00	2.835	B	52.00	2.047	C	37.00	1.457	D	9.50	0.374	E	35.00	1.378	F	21.00	0.827	G	18.50	0.728	H	31.00	1.220	J	2.60	0.102	
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2.3 Version information of the Tool-Chain components

To get this ETK running with the other components of the Tool-Chain please make sure that the version mentioned below or a newer one is used. If your software-, firmware- or hardware version is older, please update it.

If you have any problems to get this ETK running please contact our local customer support or sales representative.

Name	Needed version	Remarks
HSP	V 3.1.2	Includes MAC2, ES690, and ES1000.2 system files
ES690	V 8.1.5	Supported
ES1000.2/3 - system	V 8.1.6	ES1232 supported with ES1120
ES1000.1	Not supported	
MAC2	Not supported	
Software		
ETK Configuration Tool	V 4.0.0	
INCA	V 5.1.0/5	INCA5.1.0 hotfix5
INCA	V 5.2.0	Recommended for future ETK-HDC update procedures
ASCET	V 5.0.1	INCA in parallel
ASCET-RP	V 5.1.0	
INTECRIO	V 1.0	INTECRIO standalone or in parallel to INCA5.x (or higher)

The registered user will automatically receive the newest INCA-version (CD-ROM)
Updates or refreshes can be downloaded from the ETAS homepage:

<http://de.etasgroup.com>

<http://en.etasgroup.com>

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3 PLD-Code Changes

3.1 General remarks to this chapter

The programmable logic code within the ETKT1.1 is stored onto programmable logic devices (FPGA). The FPGA-code starts with version 2.1. For the version syntax please refer to chapter 2.1.

3.2 FPGA-Code

Revision	File date	Description
Version 2.1	09.09.2005	Initial Version
Version 2.2	19.06.2009	The change to a new RoHS conform hardware variant Rev.B requires a new FPGA revision. This new version 2.2 can't be programmed into the Rev.A hardware.

3.2.1 Delivery condition

The FPGA version **2.2** will be programmed into all new shipments.

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4 Hardware Changes

4.1 General remarks to this chapter

Hardware problems or obsolete parts can make it necessary to change the manufacturing of this ETK. Information about the changes are listed underneath. The hardware-state starts with version A010. For the version syntax please refer to chapter 2.1.

4.2 HW changes

Revision	Description
A010	Initial Version
B010	RoHS conform hardware variant with same electrical functionality and mechanical dimension as A010

4.2.1 Delivery Condition

The hardware-state **B010** will be delivered with all shipments.

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Abbreviations

ETK	Emulator test probe
ES1000	VME - system, successor of INCA-VME
INCA-VME	Old VME - system for MC and RP
ES690	MC hardware, successor of MAC2
MAC2	Old MC hardware
INCA	MC software, successor of VS100
ETK Configuration Tool	Configuration Software, in order to configure an ETK, successor of the old DOS tool
HSP	H ardware S ervice P ack; ETAS product which includes the firmware for the complete ETAS hardware, shipped together with INCA but also available as standalone product, download at ETAS homepage possible
Firmware	Software for MC hardware; necessary for implementation of new features or bugfixes
Hotfix	Software bugfix for a refresh version
Tool-chain	MC hardware (e.g. ES690) and software (e.g. INCA)
MC	M easurement & C alibration
RP	R apid P rototyping
PLD	P rogrammable L ogic D evice
FPGA	F ield P rogrammable G ate A rray; interface component to the application hardware
PCB	P rinted C ircuit B oard
DPR	Dual Ported RAM; special RAM onto the ETK which allows an access from ECU and application hardware at the same time
/CS	Chip select