

Product:	ETKT2.2	Rev :	02	Page 1 of 10
Title :	Change Information			

Product :	ETKT2.2			
Title :	Change Information			
File :	ETKT2.2_Change_Information_V02.doc			
TTNR :	ETK-T2.2A F-00K-107-061 ETK-T2.2B F-00K-107-062 ETK-T2.2C F-00K-107-063 ETK-T2.2D F-00K-107-064			
Comments :	Currently shipped: 41A010 FPGA version: V4.1 Hardware-state: A010			
Created:	Name Mai	Department PGA/PRM-H	Signature Mai	Date 2011-07-20
Released:	Name Dudziak	Department PjJM	Signature Dudziak	Date 2011-07-21

Changes

Revision	Description	Date	Name	Signature
01	40A010 - initial Version	2008-02-11	Mai	Mai
02	41A010 - New FPGA Version [chapter 3.2]	2011-07-20	Mai	Mai

Product:	ETKT2.2	Rev :	02	Page 2 of 10
Title :	Change Information			

Table of Contents

1	General remarks to this document.....	3
2	Tool-Chain Information.....	4
2.1	Version-Syntax of the ETKT2.2.....	4
2.2	Product Variants.....	5
2.2.1	ETK-T2.2A.....	5
2.2.2	ETK-T2.2B.....	5
2.2.3	ETK-T2.2C.....	6
2.2.4	ETK-T2.2D.....	6
2.3	Version information of the Tool-Chain components.....	7
2.3.1	Hardware support.....	7
2.3.2	Software and microcontroller support.....	7
3	PLD-Code Changes.....	8
3.1	General remarks to this chapter.....	8
3.2	FPGA-Code.....	8
4	Hardware Changes.....	9
4.1	General remarks to this chapter.....	9
4.2	No changes at hardware-state A010.....	9
	Abbreviations.....	10

Product:	ETKT2.2	Rev :	02	Page 3 of 10
Title :	Change Information			

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 ETKT2.0
- 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

Product:	ETKT2.2	Rev :	02	Page 4 of 10
Title :	Change Information			

2 Tool-Chain Information

2.1 Version-Syntax of the ETKT2.2

The ETKT2.2 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, ...)

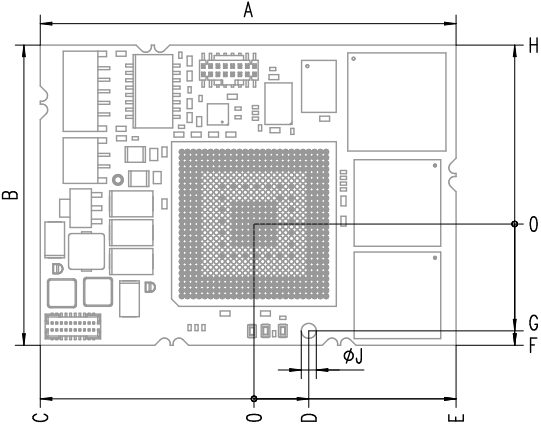
The first delivered hardware states of the ETK-T2.2 were the following.

- ETK-T2.2A: **40A010/01**
- ETK-T2.2B: **40A010/02**
- ETK-T2.2C: **40A010/03**
- ETK-T2.2D: **40A010/04**

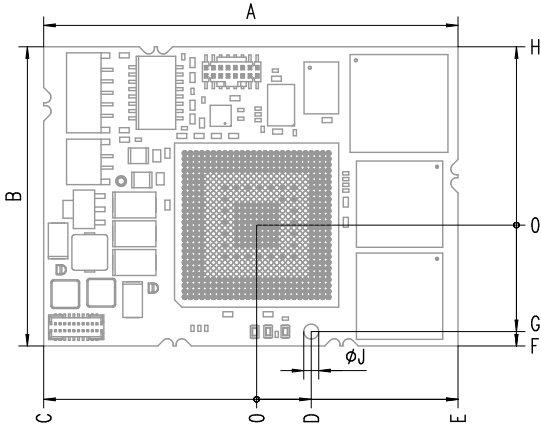
2.2 Product Variants

In general the ETK-T2.2 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-T2.2A

Item number	F-00K-107-061																														
Description	Emulator probe with 441 pin adapter for a TC1792, TC1793, TC1796 or TC1797 ECU, with 1MB memory per page																														
For details refer to datasheet	 <table border="1" data-bbox="1114 792 1433 1169"> <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
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																													

2.2.2 ETK-T2.2B

Item number	F-00K-107-062																														
Description	Emulator probe with 441 pin adapter for a TC1792, TC1793, TC1796 or TC1797 ECU, with 1MB memory per page, with BDR support																														
For details refer to datasheet	 <table border="1" data-bbox="1114 1583 1433 1960"> <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
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																													

Product:	ETKT2.2	Rev :	02	Page 6 of 10
Title :	Change Information			

2.2.3 ETK-T2.2C

Item number	F-00K-107-063																																														
Description	Emulator probe with 416 pin adapter for a TC1792, TC1793, TC1796 or TC1797 ECU, with 1MB memory per page, with BDR support and additional holes for mounting inside the ECU housing																																														
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>62.90</td><td>2.476</td></tr> <tr><td>B</td><td>76.40</td><td>3.008</td></tr> <tr><td>C</td><td>35.84</td><td>1.411</td></tr> <tr><td>D</td><td>32.64</td><td>1.285</td></tr> <tr><td>E</td><td>18.50</td><td>0.728</td></tr> <tr><td>F</td><td>23.86</td><td>0.939</td></tr> <tr><td>G</td><td>27.06</td><td>1.065</td></tr> <tr><td>H</td><td>38.40</td><td>1.512</td></tr> <tr><td>J</td><td>35.20</td><td>1.386</td></tr> <tr><td>K</td><td>9.50</td><td>0.374</td></tr> <tr><td>L</td><td>34.80</td><td>1.370</td></tr> <tr><td>M</td><td>38.00</td><td>1.496</td></tr> <tr><td>N</td><td>3.20</td><td>0.126</td></tr> <tr><td>P</td><td>2.70</td><td>0.106</td></tr> </tbody> </table>	DIM	MILLIMETERS	INCHES	A	62.90	2.476	B	76.40	3.008	C	35.84	1.411	D	32.64	1.285	E	18.50	0.728	F	23.86	0.939	G	27.06	1.065	H	38.40	1.512	J	35.20	1.386	K	9.50	0.374	L	34.80	1.370	M	38.00	1.496	N	3.20	0.126	P	2.70	0.106
DIM	MILLIMETERS	INCHES																																													
A	62.90	2.476																																													
B	76.40	3.008																																													
C	35.84	1.411																																													
D	32.64	1.285																																													
E	18.50	0.728																																													
F	23.86	0.939																																													
G	27.06	1.065																																													
H	38.40	1.512																																													
J	35.20	1.386																																													
K	9.50	0.374																																													
L	34.80	1.370																																													
M	38.00	1.496																																													
N	3.20	0.126																																													
P	2.70	0.106																																													

2.2.4 ETK-T2.2D

Item number	F-00K-107-064																															
Description	Emulator probe with 416 pin adapter and a populated TC1797ED * instead of a socket, with 1MB memory per page.																															
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
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																														

* The microcontroller needs to be provided by the customer

Product:	ETKT2.2	Rev :	02	Page 7 of 10
Title :	Change Information			

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.

The registered users with a valid INCA SW Service Contract will automatically receive the newest INCA-version (CD-ROM).

Updates or refreshes can also be downloaded from the ETAS homepage:

www.etas.com

2.3.1 Hardware support

The ETK-T2.2 is supported by ES690, ES59x, ES910 and ES100.2/3 system with ES1232.

2.3.2 Software and microcontroller support

List of supported Infineon microcontroller:

AUDO Family	Microcontroller	HSP	INCA	ETK Drivers and Tools	ASCET-RP	INTECRIO
Next Generation	TC1792	V8.1.0	V5.4	n. a.	V5.4	V1.1
	TC1796	V8.1.0	V5.4	n. a.	V5.4	V1.1
	TC1796ED ¹⁾	V8.1.0	V5.4	n. a.	V5.4	V1.1
Future	TC1797 ¹⁾	V8.1.0	V5.4	n. a.	V5.4	V1.1
	TC1797 ²⁾	V8.1.0	V6.1	V1.1.2	V5.4	V1.1
	TC1797ED ¹⁾	V8.1.0	V5.4	n. a.	V5.4	V1.1
	TC1797ED ²⁾	V8.1.0	V6.1	V1.1.2	V5.4	V1.1
MAX	TC1793	V8.1.0	V6.2.1 ³⁾	V2.1.7	V5.4	V1.1
	TC1793ED	V8.1.0	V6.2.1 ³⁾	V2.1.7	V5.4	V1.1

- 1) Operating measurement and calibration, no Braindead Flashing
- 2) Operating measurement and calibration, and Braindead Flashing
- 3) With ETK-T2.1 Config String in A2L File is an INCA V5.4 usage also supported

Product:	ETKT2.2	Rev :	02	Page 8 of 10
Title :	Change Information			

3 PLD-Code Changes

3.1 General remarks to this chapter

The programmable logic code within the ETKT2.2 is stored onto programmable logic devices (FPGA). The FPGA-code starts with version 4.0. For the version syntax please refer to chapter 2.1.

3.2 FPGA-Code

Revision	File date	Description
Version 4.0	03.08.2010	Initial Version
Version 4.1	07.02.2011	Parallel writing of Reference and Working page for Service Based Bypass V3 was added

Delivery condition:

The FPGA version 4.1 will be programmed into all new shipments.

Product:	ETKT2.2	Rev :	02	Page 9 of 10
Title :	Change Information			

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 No changes at hardware-state A010

Delivery condition:

The hardware-state A010 will be delivered with all shipments.

Product:	ETKT2.2	Rev :	02	Page 10 of 10
Title :	Change Information			

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
BDR	Brain Dead Recovery