

	ETAC6	Edition/No.	Page	Date
		4	1 / 10	07.12.01
Editor			Telefon	
B. Hofmeier			0711/89661-118	

Etac6_en.doc

Data Sheet
ETK ADAPTOR
ETAC6
F00K 000 591

Adaptor for operating an ETK in an ECU with SAMTEC connector

	ETAC6	Edition/No.	Page	Date
		4	2 / 10	07.12.01
		Editor	Telefon	
		B. Hofmeier	0711/89661-118	

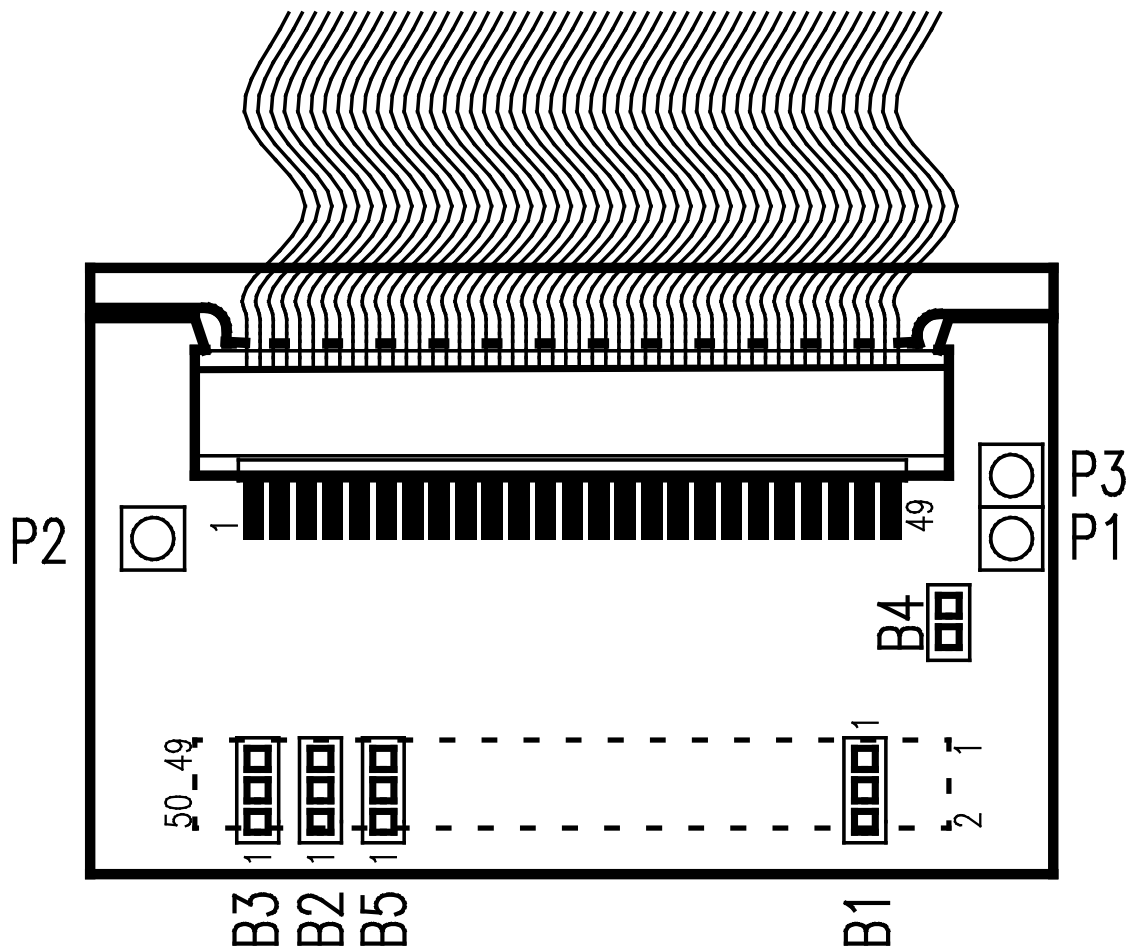
Etac6_en.doc

1 Contents

1	CONTENTS	2
2	POSITION AND PIN ASSIGNMENT OF CONNECTORS, JUMPERS AND ADDITIONAL PINS	3
2.1	TOP VIEW OF LP-VERSION V1.0	3
2.2	VIEW OF ADAPTER ETAA1 V1.0	4
2.3	ASSIGNMENT OF SAMTEC CONNECTOR ST2 TO ECU	5
2.4	ASSIGNMENT ST1 TO ETK6	6
2.5	ASSIGNMENT OF ADDITIONAL PINS	6
3	CIRCUIT DIAGRAM	7
3.1	VERSION V1.0	7
4	MEASUREMENTS	8
5	CONNECTION INSIDE CONTROL UNIT	9
5.1	GENERAL REMARK	9
5.2	ETK RECOGNITION	9
5.3	ECUS FOR ETAC6	10

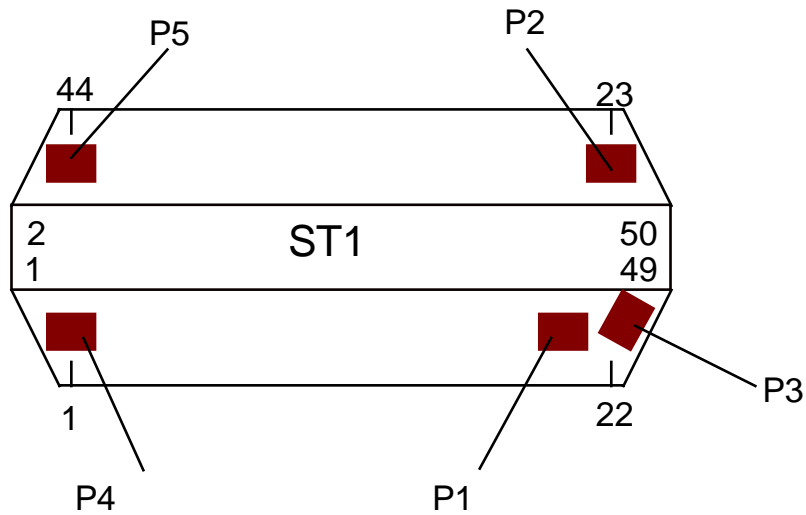
2 Position and Pin Assignment of Connectors, Jumpers and Additional Pins

2.1 Top View of LP-Version V1.0



2.2 View of Adapter ETAA1 V1.0

If there's no connector provided for the ETAC6 in the ECU, this adaptor can be soldered on the ECU's PCB instead of the flash EPROM (SOP44 housing).



	ETAC6	Edition/No.	Page	Date
		4	5 / 10	07.12.01
Editor			Telefon	
B. Hofmeier			0711/89661-118	

Etac6_en.doc

2.3 Assignment of SAMTEC Connector ST2 to ECU

1	/SGRES	2	/BHE
3	(N.C.)	4	(N.C.)
5	SGA19	6	/SGWR
7	SGA18	8	SGA9
9	SGA8	10	SGA10
11	SGA7	12	SGA11
13	SGA6	14	SGA12
15	SGA5	16	SGA13
17	SGA4	18	SGA14
19	SGA3	20	SGA15
21	SGA2	22	SGA16
23	SGA1	24	SGA17
25	/SGCS	26	(N.C.)
27	GND	28	GND
29	/SGRD	30	SGD15
31	SGD0	32	SGD7
33	SGD8	34	SGD14
35	SGD1	36	SGD6
37	SGD9	38	SGD13
39	SGD2	40	SGD5
41	SGD10	42	SGD12
43	SGD3	44	SGD4
45	SGD11	46	USG
47	SGA0	48	SGALE
49	/SGCS_RAM	50	GND

2.4 Assignment ST1 to ETK6

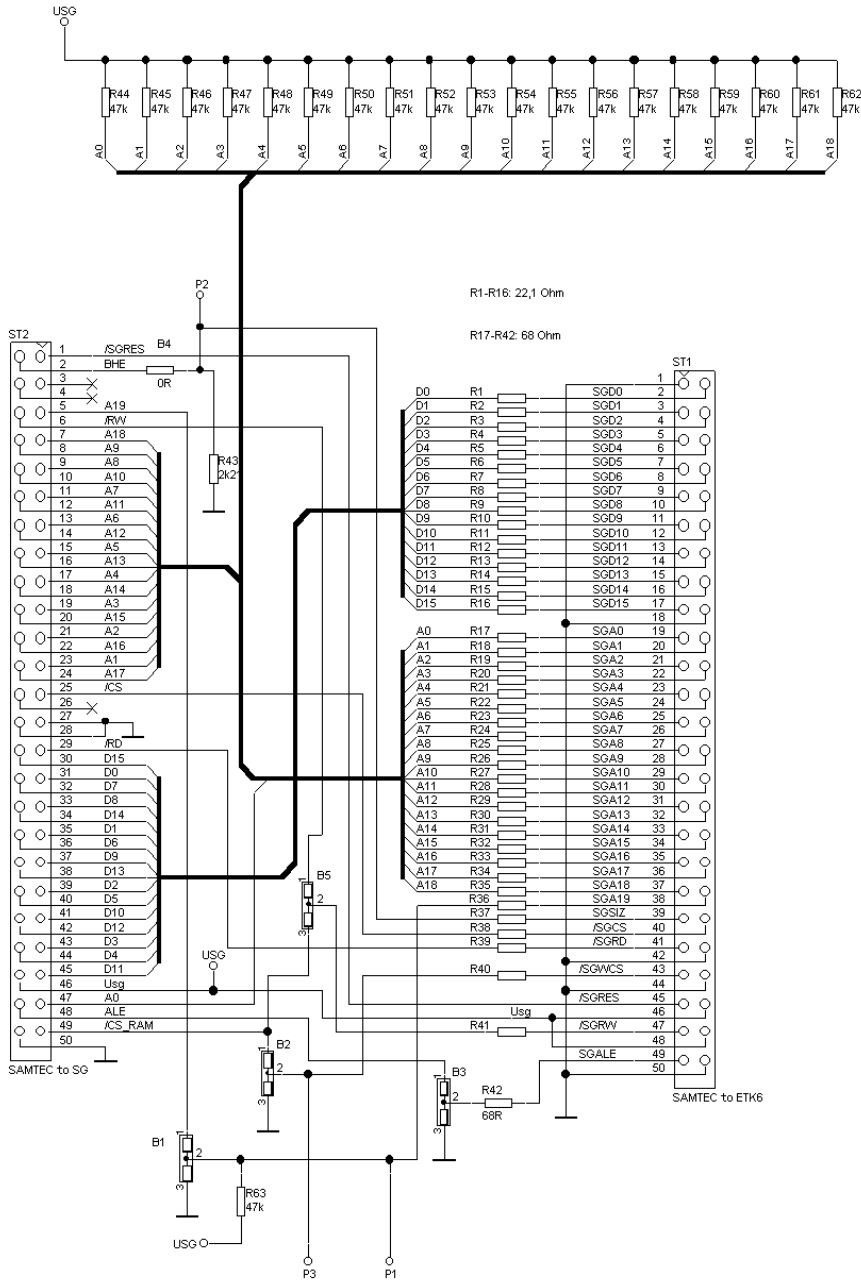
1	GND	2	SGD0
3	SGD1	4	SGD2
5	SGD3	6	SGD4
7	SGD5	8	SGD6
9	SGD7	10	SGD8
11	SGD9	12	SGD10
13	SGD11	14	SGD12
15	SGD13	16	SGD14
17	SGD15	18	GND
19	SGA0	20	SGA1
21	SGA2	22	SGA3
23	SGA4	24	SGA5
25	SGA6	26	SGA7
27	SGA8	28	SGA9
29	SGA10	30	SGA11
31	SGA12	32	SGA13
33	SGA14	34	SGA15
35	SGA16	36	SGA17
37	SGA18	38	SGA19
39	SGSIZ	40	/SGCS
41	/SGRD	42	GND
43	/SGWCS	44	GND
45	/SGRES	46	USG
47	/SGRW	48	USG
49	SGALE	50	GND

2.5 Assignment of Additional Pins

P1	SGA19
P2	/BHE
P3	/SGWCS

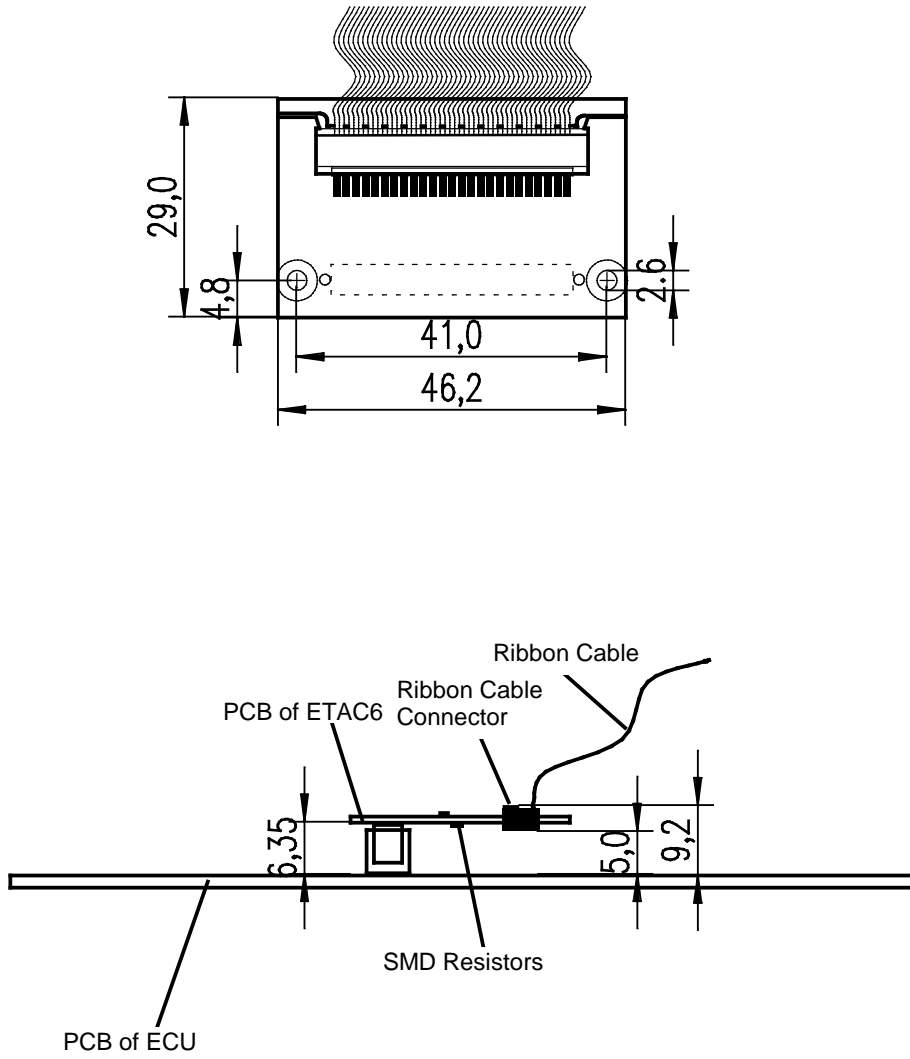
3 Circuit Diagram

3.1 Version V1.0



BV1	B1	B2	B3	B4	B5
1	OR 1-2 OR 2-3	OR 1-2 OR 2-3	OR 2-3 OR 2-3	OR OR	OR 1-2 OR 2-3
2					

4 Measurements



	ETAC6	Edition/No.	Page	Date
		4	9 / 10	07.12.01
Editor			Telefon	
B. Hofmeier			0711/89661-118	

Etac6_en.doc

5 Connection inside Control Unit

5.1 General Remark

In order to connect the ETK adaptor **ETAC6** in the ECU, there must a connector of the Samtec Corp. be provided in the ECU layout. Usually, this is placed between the pads of the flash EPROM. The identifier of the connector is „**TFM-125-02-S-D**“. If this connector is not provided, it is also possible to solder an **ETAA1 adaptor** on the PCB instead of the flash. The **ETK adaptor or flash adaptor** can then be plugged onto this adaptor.

5.2 ETK Recognition

In order to detect from the ECU side whether an ETK or flash EPROM is connected, a pulldown resistor is provided at the /BHE signal on the ETK adaptor.

	ETAC6	Edition/No.	Page	Date
		4	10 / 10	07.12.01
Editor			Telefon	
B. Hofmeier			0711/89661-118	

Etac6_en.doc

5.3 ECUs for ETAC6

Steuer- gerät	ETAC6 Version	Brücke B1	Brücke B2	Brücke B3	Brücke B4	Brücke B5	/SGCS	/SGRES	/SGWCS	SGSIZ	SGA0	SGA19
ME7.7	A010/01						/CS_Flash	/RES vom Stabi über P4 von ETAA1	/CS ext. RAM über P3 von ETAA1	/BHE über P5 von ETAA1	µC A0 über P1 von ETAA1	µC A19
MG7.9.0	A010/03						/CS_Flash	/RES vom Stabi	/CS ext. RAM	---	µC A0	---
GS8.60	A010/02						/CS_Flash	/RES vom Stabi	/SGWCS wird über B5 an /SGRW gelegt	/BHE	µC A0	---
EDG15C	A010/01						/CS_Flash	/RES vom Stabi	/CS ext. RAM	/BHE	µC A0	µC A19