



Using measure points in an ASCET ETK-Bypass Project with Robert Bosch Diesel System ECUs

PROBLEM DESCRIPTION

Some values are not [verb is missing] correctly into the ETK-bypass simulation of a Robert Bosch Diesel ECU (e.g., EDC15/EDC16), [something is missing] into the access mode Distab or the ECU resets at the start of the bypass.

Reading into INCA via ETK is possible.

All values have the memory space EXTERN and will likely have the extension "_mp" in their name which designates them as measuring points.

Groups		Signals			Mappings	
Signal	Signal Address (hex)	Signal Data Type	Signal Size	Signal Offset (hex)	Signal Location	Access
AC_nACComp_mp	f4FE248	int16	2	0	Extern	Distab
AC_pwrDes	f3FAFB2	int16	2	2	Intern	Distab
AC_pwrLead	f3FAFB4	int16	2	4	Intern	Distab
AC_rAdjVal_mp	f4FE24A	int16	2	0	Extern	Distab

SOLUTION

Configure the measurements as FAR – values in the global settings of the ETK-bypass element.

1. Insert the lowest "_mp" address in "Begin Far Address Range"
2. Insert the length of the range of the "_mp" measurements into "Length Far Address Range"
3. Insert the maximum allowable number of "_mp" signals into "Max Far Signals" (should not be greater than 10!)

When you switch back to the tag **Signal**, the signal location for all affected signals will automatically to be changed to "FAR"!

Signal	
<	Location
=	Far
=	Far

These settings can be done using one of two different methods:





- Only the addresses of the required "_mp" values are used for this area. (In this case, the same problem may occur again whenever a different "_mp" value is selected which is located outside of the defined area.)
- The entire area of measurement points from the ASAM2-MC (ASAP2) file is considered. Usually, a memory segment has been designated for this purpose (see example).

Example for memory segment in the f ASAP2-MC file:

```
/begin MEMORY_SEGMENT ExtRam4FE000
""
  VARIABLES RAM EXTERN 0x4FE000 0x2000 -1 -1 -1 -1 -1
  /begin IF_DATA ETK
    ADDR_MAPPING 0x4FE000 0x4FE000 0x2000
  /end IF_DATA
/end MEMORY_SEGMENT
```

Result values from the example: Begin: 0x4FE000 Length: 0x2000

Please note: The part of the D ASAM2-MC description file shown here serves only as an example. The segment in any other file may have a completely different name, a different address and be of a different length!

Additional Notes:

These measurement points can only be accessed if an ETK is involved. It is not possible to read in these values using different calibration hardware/protocols (e.g., CCP, MCMess, KWP2000). (Exception: If an ECU is mounted on the ETK and access to the ETK-RAM has been activated).

The correct location of this memory area has to be provided by the ECU manufacturer. ETAS cannot provide this information.

APPLIES TO PRODUCTS

ASCET-RP, Bypass, A2L, ASAP2, ASAM-2MC

ADDITIONAL SEARCH TERMS

Bypass, RTIO, EDC, A2L, ASAP2, ASAM-2MC

