

# X CAT

Preliminary

**X** CAT is a product of the automotive diagnosis family of I+ME ACTIA's innovative products for vehicle analysis. It allows the analysis of the communication with a vehicle on multiple CAN channels at the same time. XCAT is developed to be used for engineering production and test phase of a car. Due to the architecture it is possible to run different or identically applications on each of the CAN channels. The connection to the PC is realized as simple as possible, all realtime processes are executed by the XCAT hardware. The internal hardware structure and the software of XCAT guarantee the communication with the car also on the high speed CAN bus with logging of data on each of the CAN-channels.



## FEATURES

- interfacing between four CAN buses of a car and test PC
- On-board data (pre-) processing
- Several filter and trigger options are offered for each channel
- High performance data acquisition into the internal buffer without data loss for each of the channels
- Program download via RS232 and bootloader options for firmware update
- Different applications can be executed on the hardware and on the PC for each channel
- Optional application development under Windows 95/98/ME and Windows NT/2000 for diagnosis and real-time requirements

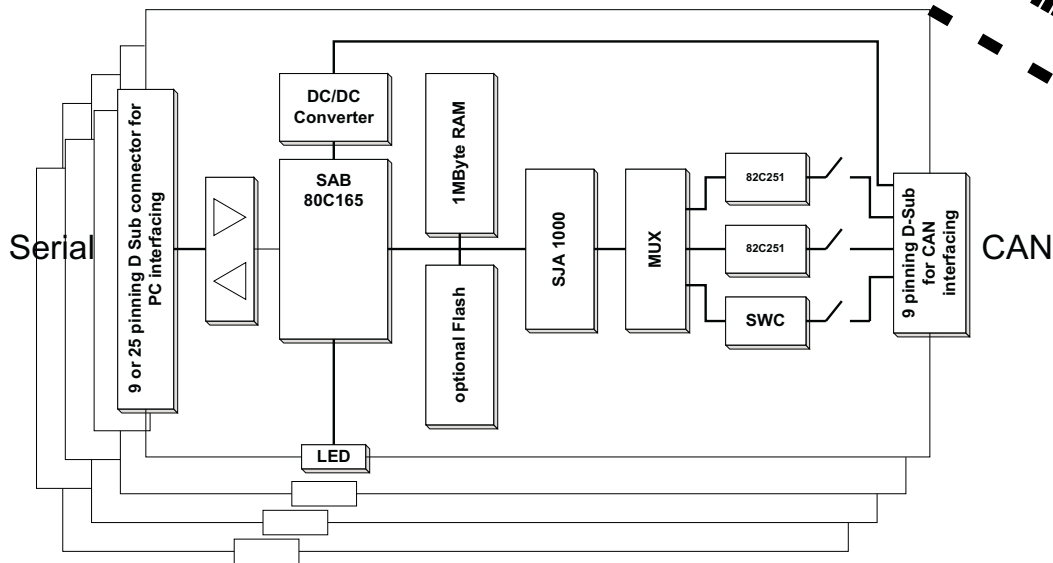
## HIGHLIGHTS

- Rugged and compact housing
- Easy to handle connection to PC
- Stand alone operations
- Supports up to 4 x CAN 2.0B
- Full support of Single Wire CAN (SWC) and ISO 11898
- Easy to handle of expansions to 4 channels maximum by the usage of approved CAT hardware
- CAN services in accordance to GMLAN are directly supported

# Multi CAN Communication

IME

Preliminary



## SPECIFICATIONS

### General Characteristics for each channel

- Transfer rate CAN: up to 1 MBit/s
- Transfer rate RS232: up to 115,2 kBaud
- Performance: recommend Pentium class with 400MHz, 16 MB RAM, 320 MB HDD  
without filter usage: 100% busload at 1 MBit/s  
with 1 of 10 filters: 100% @ 500 kBit/s
- Physical dimensions: 95,5mm x 41mm x 20mm
- Housing: Metal
- Power supply: External 8..16 VDC (typ. 70mA each channel), via power jack or CAN bus connector
- Power consumption: max. 250 mA at 12VDC (each channel)
- Temperature range: 0 °.. +70° C
- Processor types: C165, @ 18,432 MHz
- Memory: 1 MByte SRAM

### Connectors

- Network: 9-pin Sub-Min-D or GM specific (extended CiA pinning)
- RS232 25-pin Sub-Min-D for RS232  
9-pin Sub-Min-D for RS232 via adapter cable

### Network protocol interfaces

- Internal: SJA 1000

### Network physical interfaces

- Internal: CAN 1: ISO 11 898 (82C251)  
CAN 2: ISO 11 898 (82C251)  
CAN 3: SWCAN (GMW 3089)

## GENERAL INFORMATION

- Hardware requirements:
- PC Pentium Class 400 MHz,, 16 MB RAM. 320 MB HDD, VGA or better
- Bus cable power
- 4 x RS232 interface
- Prototype supports Windows 95/98, Windows NT

## PRODUCT INCLUDES

- 1 XCAT (4 independence CAN channel)
- CAT Software, XCAT Software

## ADDITIONAL SUPPORT

- PC-card with 4 x RS232 channels
- USB-module with 4 RS232 channels
- Power supply pack for XCAT

## ORDERNUMBERS

- IME 3501 403 XCAT Set (without RS232 HW)
- IME 3501 404 XCAT Set (incl. RS232 HW)