



## SAM ATOM

The SAM second generation is an open, powerful and modular x86 embedded solution.

The SAM ATOM features a new robust mechanical base; it is fan-less and compatible with various Operating Systems. The system can provide location, communication, multimedia and driver-vehicle interface functions.

The wide selection of options ensures a high level of customization for any application i.e. intelligent transportation systems (ITS), ticketing systems, CCTV and data servers.

Discover the new embedded PC that will take any application to the next level!

### SPECIFICATIONS

- Processors:
  - Intel® ATOM™ Z520 1.3 GHz
  - Intel® ATOM™ E3825/26/27 up to 1.7GHz dual core
  - Intel® ATOM™ E3845 1.9GHz quad core
- Ethernet – COM – USB interfaces
- Multiple Input / Output
- Automotive interfaces
- VGA and LVDS interfaces
- Audio interfaces
- Industrial Compact Flash interface
- GPS with dead reckoning
- GSM/GPRS/3G+ – Wi-Fi
- Additional functionality: COM, USB, Tachograph, etc
- Operating temperature: -40°C/+65°C

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## Embedded PC



### TECHNICALS SPECIFICATIONS

#### PC CORE

##### Processors

Intel® ATOM™ Z520 1,3GHz  
Intel® ATOM™ E3825/26/27 1.3Ghz/1.4Ghz/1.7Ghz Dual Core  
Intel® ATOM™ E3845 1.9Ghz Quad Core

##### Chipsets

Intel® Poulso US15WPT  
Intel® Baytrail E3825/26/27  
Intel® Baytrail E3845

##### Memory

Poulsbo chipset: up to 2Gb DDR2  
Baytrail chipset: up to 4Gb DDR3L

##### Ethernet

10/100 Mb/s in SUBD format

##### Videos controller

Double integrated video controller / Double independent display capability LVDS and VGA

##### Serial lines

2 COM RS232/422/485 - Software configurable  
*Additional serial lines with ACTIA PCs interface box\*\**

##### IDE1

Compact flash interface

##### USB lines

2 USB on I/O interface  
1 USB A type for maintenance purpose  
*Additional USB lines with ACTIA PCs interface box\*\**

##### SATA

SATA half slim interface for SSD

##### Audio

2 Stereo audio lines outputs  
1 Microphone input

#### AUTOMOTIVES FUNCTIONS

##### Power supply

12/24V ISO7637-3 power supply managed with ignition management of sleeping and wake-up modes

##### Input / Output

7 protected inputs 12/24V ISO7637  
4 relays outputs 0.5A  
*Additional I/O with ACTIA PCs interface box\*\**

##### Protections

Independent environmental and power supply management controller

##### Field bus

2 CAN High speed  
*Additional CAN with ACTIA PCs interface box\*\**

##### GPS

UBlox with 50 channels (Galileo and dead reckoning compliant)

##### Pre-heating

Pre-heating system to operate at -40°C \*

##### GSM / 3G+

Cinterion GSM/GPRS/EDGE/3G+/HSPA automotive modem\*

##### Power consumption

15 Watts max according to configuration

##### WiFi

Wifi a/b/g/n (5Ghz / 2,4Ghz)

##### Dimensions

221x173x105mm

##### Operating temperature

-40°C / +65°C – preheating system

##### Storage temperature

-40°C / +85°C

#### ACTIA PCs

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\* Available option for custom version

\*\* Interface box (mixing panel): interface to connect and manage multiple I/O within the vehicle

