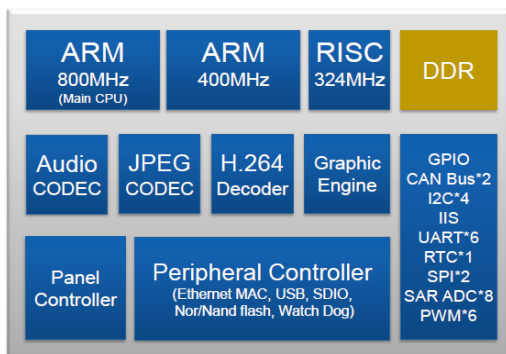# IT986x – iTE's 3rd generation application SOC

IT986x family is the perfect single-chip solution for many high-volume applications which requires a powerful HMI (human-machine-interface). It combines multiple different I/O-interfaces, with a powerful GUI at very high cost effectiveness. The IT986 comes with a complete set of powerful HMI development and simulation tools, that allows users to quickly complete the development of their application

Features

- Dual ARM CPU (main CPU 800MHz)
- Panel resolution up to 2160*1080
- Panel interface (MIPI, RGB, LVDS, CPU, SPI)
- Fast Booting (~1 sec)
- USB (Host)
- Audio In/out
- UART, SDIO, PWM, ADC, SPI, I2C, GPIOs
- CAN Bus Controller
- Support Wifi, Ethernet, Bluetooth, 4G
- H.264 Decoder Up to 1080P
- Fast responding GUI
- Complete IDE, Easy to develop
- Operating temperature: -40°C to 85°C
- 128 Pins LQFP

Feature	IT9863	IT9867	IT9868
CPU	Arm926 800MHz Arm926 400MHz RISC 324MHz		
Stacked Memory	16MB DDR2	64MB DDR2	128MB DDR3
Video	480p H.264 Decoder	720p H.264 Decoder	1080p H.264 Decoder
Photo	JPEG, PNG		
Graphic	2D /Partial 3D function		
Display Interface	RGB, MIPI, LVDS, CPU, SPI		
Display resolution	800*480	1280*800	2160*1080
USB	2.0 OTG		
SD/SDIO	Yes		
NOR/Nand Flash	QSPI		
Ethernet MAC	10/100 Mbps		
Audio CODEC	ADC, DAC		
Video-In	BT601, BT656, BT1120		
IIC	4		
UART	6		
SPI	2		
ADC	8		
CAN	2		
RTC	1		
Package	128 Pins LQFP		
Wireless Module(Plugin)	Ethernet, 4G, Wifi, Bluetooth…		

Applications

The trend of the smartphone has urged customers to accustom to touch panel operation. This leads to all types of electronic devices to equip with a color display.

Typical Applications
- Home Applications
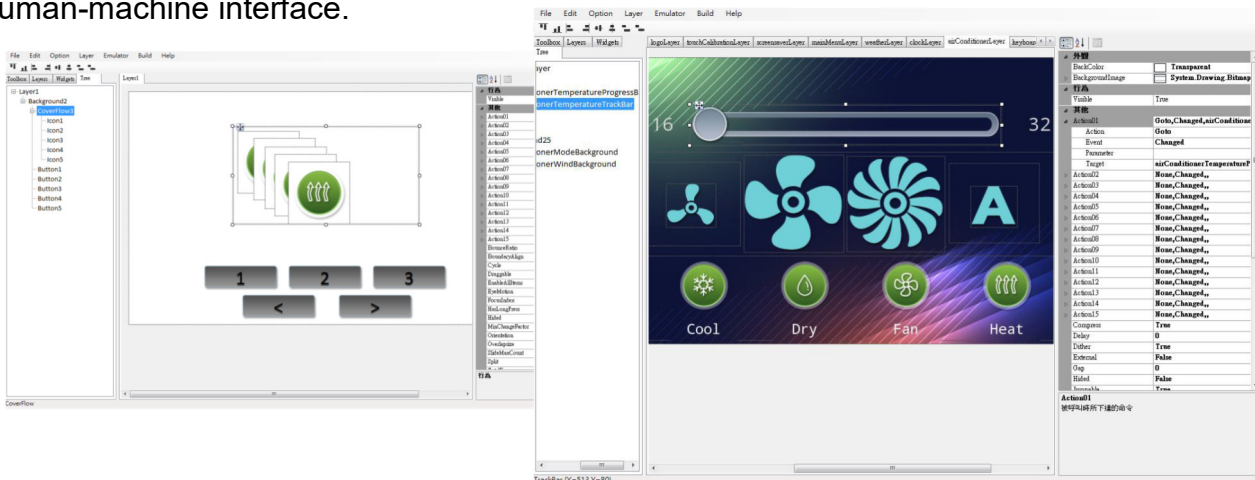- Smart-Building
- Instrumentation Clusters

Others
- Sports equipment
- Elevator display
- Electronic sale
- Advertisement displays
- Etc.

Benefits

- ➢ Fast booting up (1-2 seconds)
- ➢ Rich human-machine interface
- ➢ High stability
- ➢ Multiple I/O Interfaces

- ➢ Complete with internet function
- ➢ Cloud-based intercom system connecting smartphones
- ➢ Integrated development tools

GUIDesigner

ITE provides a functional development and simulation system, which is a complete set of PC development tools, that allows users to quickly complete the development of ITE AP SoC human-machine interface.

Please also visit ITE SoC Video Channel for further information:
https://www.youtube.com/channel/UC9xGMgrXp6mXrHUyG3P_hhQ/videos