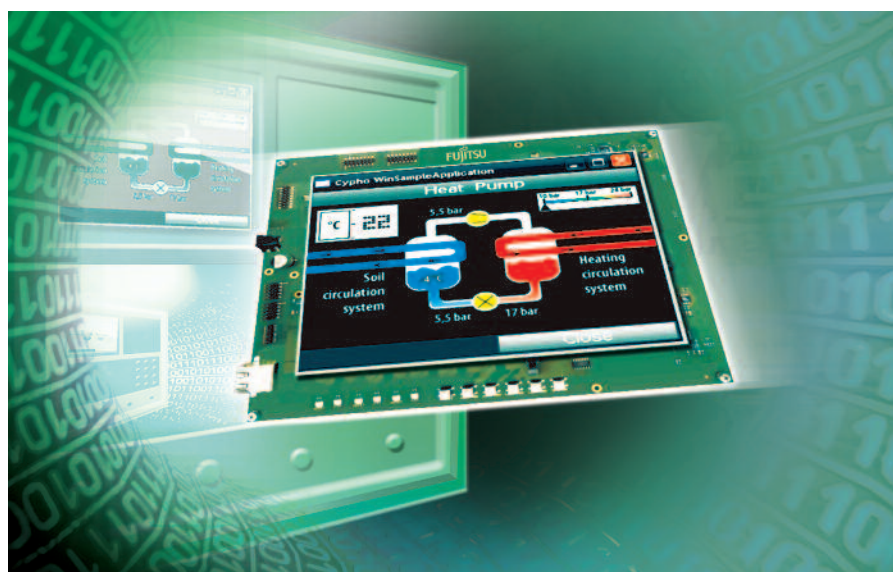# FUJITSU

Compact Indigo System –
an MB88F332 'Indigo' based Reference Design for Industrial and Automotive Remote Display and Camera Applications

Flexible reference design for extensive automotive and industrial applications

- RJ-45 connector or Rosenberger connector mountable on PCB
- Power supply via 'Power over APIX®', alternative 12V Power Connector, or auxiliary power Pins on RJ45 connector

Applications
- Automotive
  - Instrument clusters
  - Central information displays
  - Heating / climate control displays
  - Rear seat entertainment
  - Rear view cameras

- Industrial
  - Automation
  - Vending
  - Digital signage
  - White goods
  - Medical
  - Gaming
  - Scales
  - Inspection cameras
  - Robotics

Description

The SK-88F332-02 'Compact Indigo System' is a reference design for remote display and remote camera applications using Fujitsu's MB88F332 'Indigo' System-on-Chip. Video signals, the power supply voltage and bi-directional data communication are all transmitted via a single 4-wire connection between the display unit and the control unit using APIX® technology.
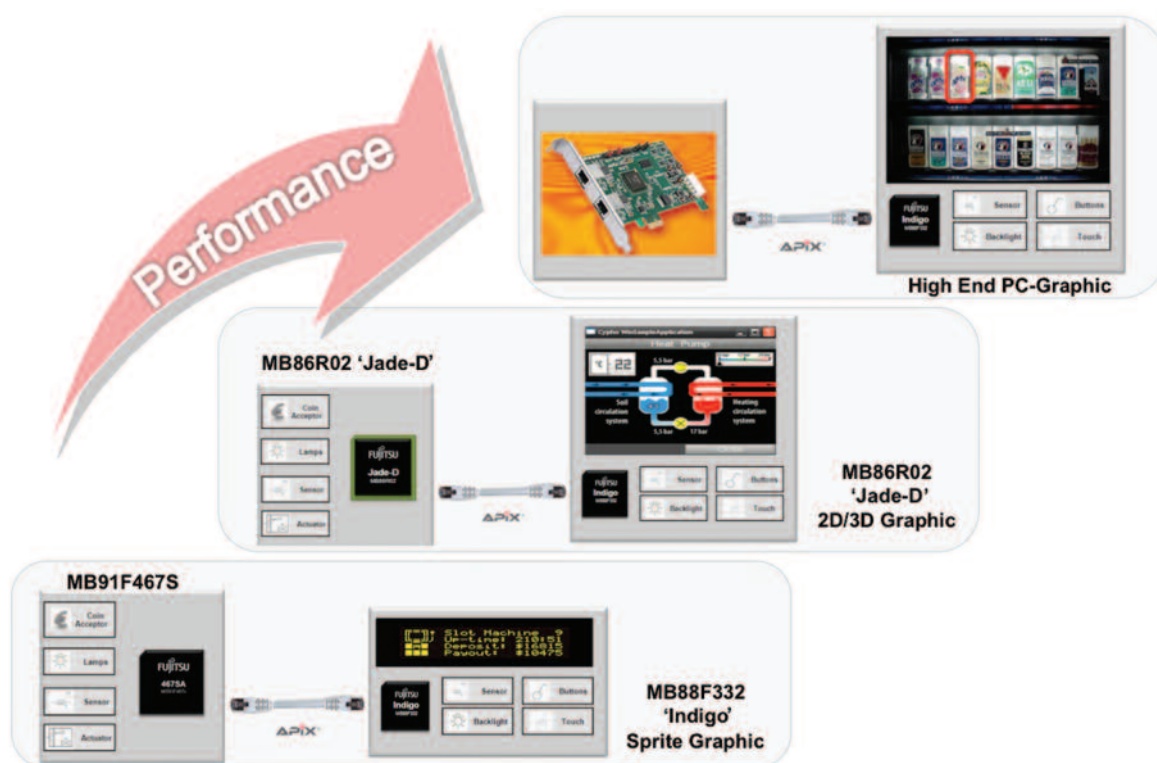
The board is compatible with Fujitsu's MB91F467S Microcontroller and MB86R02 'Jade-D' graphics controller featuring integrated APIX® technology.

For use of the SK-88F332-02 'Compact Indigo System' in combination with embedded PCs an APIX® PCI express card is available from Congatec AG.

Features
- System-on-Chip MB88F332 with integrated APIX® receiver/ transmitter
- Brilliant 800 by 480 colour TFT with LED backlight and touch screen
- Remote peripherals support such as UART, GPIO, ADC, PWM, I²C, sound, stepper motors
- 4 buttons and 4 LEDs for the demonstration of MB88F332 peripheral functions
- All MB88F332 resources connected to pin-headers on PCB for easy integration in customer applications
- Additional 16-bit MCU on board for port expansion (i.e. connection of key matrix)
- MB88F332 controllable via SPI Host interface by on-board MCU for stand-alone or camera applications

APIX®
www.inova-semiconductors.de

High End PC-Graphic

MB86R02 'Jade-D'

MB86R02 'Jade-D' 2D/3D Graphic

MB91F467S

MB88F332 'Indigo' Sprite Graphic

An APIX® PCIe card is available from Congatec AG enabling the 'Compact Indigo System' to be used in combination with embedded PCs

Ordering Information
SK-88F332-02 'Compact Indigo'
fujitsu-semiconductor.eu/indigo/order

Compatible Evaluation Systems
MB91F467S
fujitsu-semiconductor.eu/indigo/eval1

MB86R02 'Jade-D' Evaluation Board
fujitsu-semiconductor.eu/indigo/eval2

PCI express card for Embedded PC is available from Congatec AG
www.congatec.com/apix.html

Software Support
GDC-Studio
fujitsu-semiconductor.eu/indigo/
gdc-studio

GDC-Flasher
fujitsu-semiconductor.eu/indigo/
gdc-flasher

APIX Remote Handler (Light) Software
for MB91F467S
fujitsu-semiconductor.eu/indigo/apix-light

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Contact us on +49 6103 6900 or visit
http://emea.fujitsu.com/semiconductor