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ArchiTech
SILICA Design Tools

ArchiTech Board Solutions

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Content

ArchiTech Design Tools

Taking Embedded Development to the next Level

ArchiTech is the new brand for the range of design tools SILICA has developed. With ArchiTech, we offer front line support to engineers to help them bring new designs to market on time and in the most efficient possible way. We bring together superior development tools, engineering and software expertise, in-depth training and extensive documentation.

As the complexity of technology and time-to-market pressure increases, avoiding design risks and ensuring the best possible performance in the end product are becoming increasingly important aspects for developers. ArchiTech boards deliver an optimal solution in terms of speed, accuracy, flexibility and cost. We benefit from a close collaboration with leading silicon vendors and all boards and tools being developed have the suppliers' full co-operation and support. In addition, ArchiTech offers its own embedded Linux distribution, developed within the **Yocto** project, which caters for customers' needs in key market sectors and delivers the benefits of a known-good distribution. This guarantees access to the most up to date version featuring the latest additional features and upgrades.

SILICA provides ongoing support for its ArchiTech **Linux distribution** through our team of in-house software developers, dedicated to the ArchiTech strategy. We thereby combine the advantages of manufacturer-supported software at the centre of a small and focused open-source community as a subset of the wider, general Linux community.

This effectively simplifies access to applicable source code and knowledge. By working within the **Yocto project**, SILICA has created an OS that is robust and independent while delivering a number of benefits such as a standard format for the BSP layers. Offering a comprehensive development environment, comprising low-cost hardware platforms, tools and software focused across many end markets, ArchiTech enables SILICA to take a different approach when supporting our customers.

The combination of focused hardware developed in conjunction with major semiconductor manufacturers, a known Linux distribution supported in-house by SILICA engineers, strong technical support and comprehensive training for customers' engineers takes embedded development to the next level in terms of getting started quickly and ensuring a smooth and rapid completion.

Laurence Dellicott,
Technical Director EMEA
SILICA

Linux

One of our goals at ArchiTech has always been to provide engineers with all they need to develop their embedded applications quickly and efficiently. That's why we offer our own Linux distribution based on the Yocto Project. Yocto is an open source collaboration project that helps developers create custom Linux-based systems for embedded products, regardless of the hardware architecture. With ArchiTech Linux-based boards, you only need one SDK and can still choose the MPU vendor that's right for your project.

SILICA is an active Yocto participant for the ArchiTech range of embedded solutions. Our specialists work with prestigious names like Freescale, Renesas, Texas Instruments, and Xilinx to facilitate and accelerate development in Linux, avoid vendor lock-ins, and provide support to customers. The result for you is a shorter development cycle, proven technology approved by suppliers, and ArchiTech expertise and support to make your embedded Linux development a success.

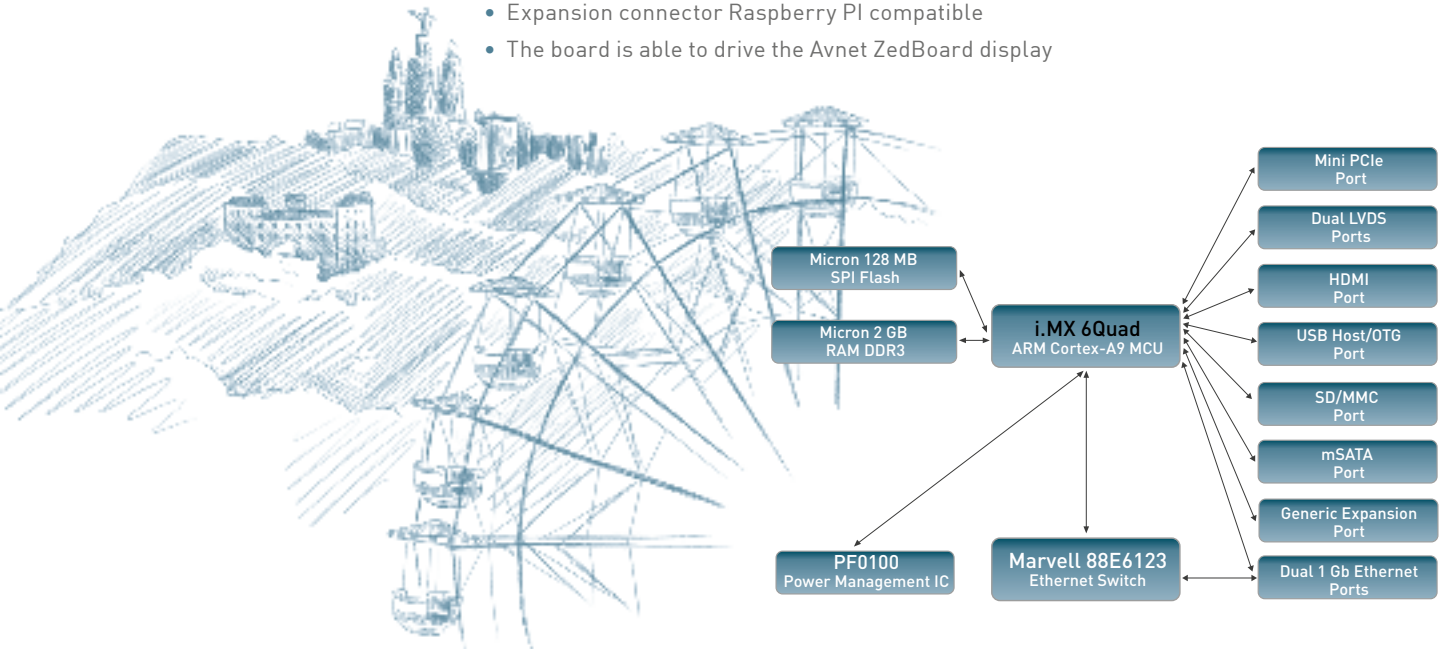
Tibidabo

i.MX 6Quad High End Multimedia Linux Board

ArchiTech Tibidabo is a high-end development and reference board based on an i.MX 6Quad ARM Cortex-A9 processor from Freescale, running on Linux. It is particularly suited for digital signage and gaming applications (high performing GPU, 2 LVDS interfaces). ArchiTech will provide SDK and Linux images based on Yocto. Schematics and gerber files are available online freely after registration.

Features

- 2 GB DDR3 RAM
  - 4 chips 256 MB x 16 bits (4 Gb/chip Micron MT41K256M16HA-125:E)
- LCD interface via 2 x LVDS to directly drive large HD display panels, using a standard 51 pin connector
- LVDS connector compatible with the Avnet display AES-ALI2-ZED-G
- HDMI interface
- 2 port USB host
- USB OTG
- mSATA interface – targeting Micron SSD drives
- 2 x 1 Gb Ethernet with an integrated switch
- SD card
- Mini PCIe connector
- Expansion connector Raspberry PI compatible
- The board is able to drive the Avnet ZedBoard display



Hachiko

RZ/A Development Kit

ArchiTech Hachiko is a joint Renesas and SILICA development kit enabling an easy HMI implementation including the OpenVG Accelerator hardware. ArchiTech Hachiko highlights the unique features of Renesas' RZ/A ARM® Cortex™-A9 processor. It is a powerful member of SILICA's ArchiTech Design Tool offering with a Linux BSP including driver source code without requiring external RAM. Schematics and gerber files are available online freely after registration.

- Linux operating system including driver source code
- Linux BSP for Yocto project
- CAN Driver
- Small form factor board

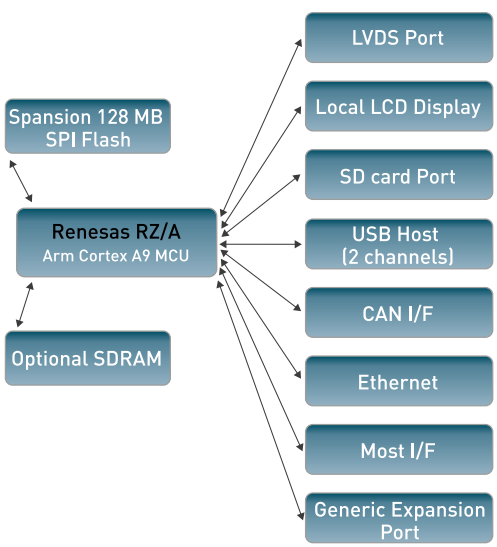
ArchiTech Hachiko is a simple design board including:

- RZ/A1H ARM® Cortex™-A9 processor
- Spansion S25FL512SDPMF QSPI Flash Memory
- Maxim MAX5098AATJ dual power supply
- SD card slot
- 1 CAN channel (in CAR entertainment)
- MOST channel (in CAR entertainment)
- 2x USB host ports
- LVDS display output
- Ethernet
- Optional SDRAM
- Optional 4.3" Wide LCD touch screen
- The board is able to drive the Avnet ZedBoard display

Operating System

- Linux kernel optimized for low memory footprint
- BSP with drivers for peripherals
- Yocto compatible

Source code will be available in open source.



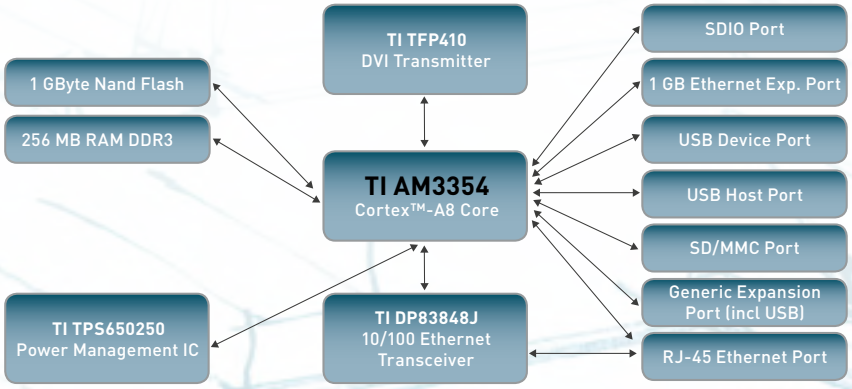
Pengwyn

Single-board computer using the TI Sitara™ AM3354 processor based on the ARM® Cortex®-A8 Core

ArchiTech Pengwyn is a low-cost Single-Board Computer based on Texas Instruments Sitara™ AM3354 Microprocessor based on the ARM® Cortex®-A8 Core. Pengwyn provides industrial customers an easy, low-cost yet powerful open platform to develop applications based on Linux. Schematics and gerber files are available online freely after registration.

Key Features

- Expansion connector for unused GPIO
- Texas Instruments Sitara™ AM3354 ARM® Cortex™-A8 720 MHz Processor
- Micron On-board memory
  - MT41K128M16JT-125:K: 256 MB RAM DDR3L - 2 GBit 128M x 16, 1.35 V, 96-pin FBGA
  - MT29F8G08ABABAWP Nand Flash 1 GByte 3.3 V TSOP
- Connectivity and expandability
  - USB Host Port
  - USB Device Port
  - RJ-45 Ethernet Port
  - Connector for optional 1 GB Ethernet Port
  - Port for generic expansions modules
  - SDIO/MMC Port (can be used for optional WI-FI/Bluetooth Modules)
  - DVI Display Port
  - Optional 4.3" Wide LCD touch screen
- Operating systems supported
  - Linux (Yocto based Distribution)



Wireless

Wireless connectivity is often an essential part of today's embedded devices – but can also be time-consuming to develop and implement. At SILICA, we have put together a range of ArchiTech boards that help you integrate wireless connectivity into your device, while giving you more time to focus on design innovation.

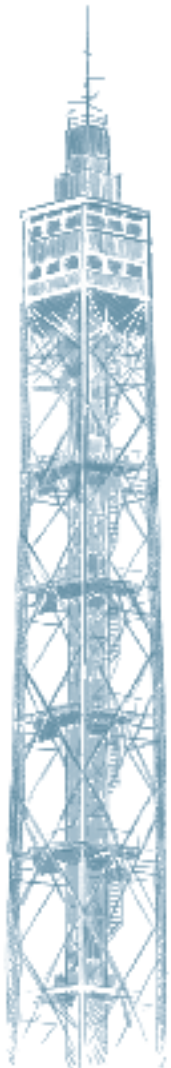
Our ArchiTech team works closely with key wireless technology players, including, Microchip, NXP, ROHM, STMicroelectronics and others. You have the peace of mind of knowing that ArchiTech boards save you time and shorten development cycles while being fully vendor-supported.

The following pages will give you an overview of ArchiTech connectivity solutions – whether your device's requirement is for Wi-Fi, Bluetooth, 802.15.4 radio or a combination.

Branca

Development Kit for the Wi-Fi Module SPWF01SX.11

ArchiTech Branca Board is composed of the STMicroelectronics' Wi-Fi module SPWF01SX.11, a USB interface to enable interaction with the module, a JTAG connector to program/emulate, and a temperature sensor to work as simple sensor node application. All the pins of the module are available through a simple through-hole connector. Schematics and gerber files are available online freely after registration.

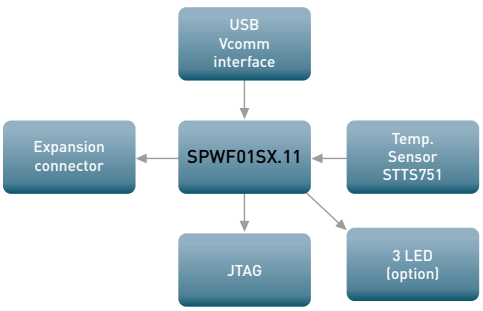


Branca Module Summary

- Radio: 2.4 GHz IEEE 802.11b/g/n
- Microcontroller: STM32 ARM Cortex-M3, Memory 64 KB RAM, 1.5 MB Flash
- Size (mm): 26.92 x 15.24 x 2.35 , side pads SMD
- Interfaces: Serial (UART, I^2C, SPI) , 16 GPIOs
- JTAG
- XTAL: Integrated 32 kHz to support low power modes
- Temperature: Industrial temperature range
- Antenna Options: Integrated antenna/U.fl. connector
- Certifications: FCC, IC and CE certified, ROHS compliant
- Software: Multiple stacks available: Full stack, AT, SDK

Branca Firmware & Software

- No specific firmware needed
- The module has AT+ commands interface: a simple terminal can be used to interact
- STMicroelectronics will release an update to enable to run user applications directly by the embedded MCU on the module



Prado

Microchip RN131 Wi-Fi Module for NXP LPCxpresso & mbed Boards

ArchiTech Prado is a daughterboard for enabling quick development of Wi-Fi applications. Microchip's RN131, a true 802.11 b/g Wi-Fi module, is a complete, ultra-low power embedded TCP/IP solution. The module's remarkable power efficiency makes a new class of internet-enabled products possible. LPCXpresso and mbed boards from NXP are quick-entry tools to jump-start designing with NXP's microcontrollers. The LPCXpresso for the LPC ARM® processor family of microcontrollers features an easy-to-use interface and supports the complete product design cycle, providing an end-to-end development solution. The mbed NXP rapid prototyping tool lets you create prototypes without having to work with low-level microcontroller details, so you can experiment and iterate faster than ever.

The ArchiTech Prado board connects the Microchip RN131 Wi-Fi module plus antenna to NXP LPCxpresso & mbed boards enabling easy and quick microcontroller Wi-Fi designs. Schematics and gerber files are available online freely after registration.

Software demos provided with the board

- Embedded web server demo with Wi-Fi
  - Board will be working as SOFT AP
- Cloud demo
  - Board will act as a HTTP client and data will be stored on a cloud server
- Software for LPCXpresso IDE, free IDE up to 256 KB
- Project files available for NXP LPC1115/303, easily portable on other NXP MCUs
- Source code of all demos available freely

Rialto

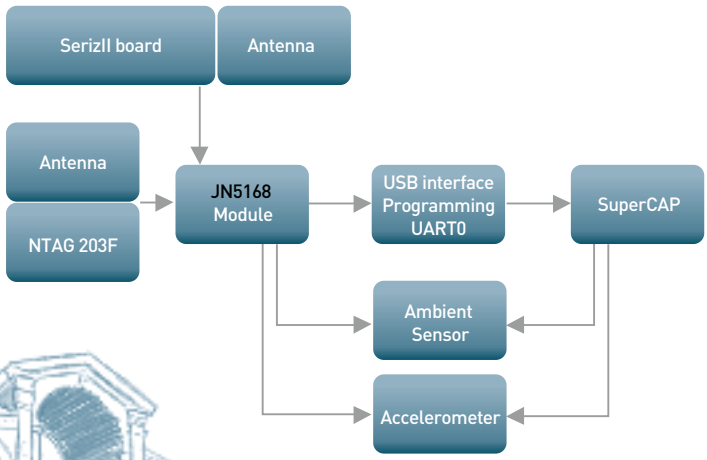
NXP Jennic JN5168 expansion board for Seriz II

ArchiTech Rialto is a kit for Seriz II which enables rapid development of wireless applications using the NXP Jennic JN5168 IEEE802.15.4 module.

The kit is composed of two identical boards, which can be used as a daughter board for Seriz II, attached to a PC, or stand alone. Schematics and gerber files are available online freely after registration.

Rialto Hardware Features

- NXP JN5168 – IEEE802.15.4 wireless module
- NXP sensor chip temperature, light, humidity
- Accelerometer sensor
- Powered by USB. A SuperCap can be used to emulate a battery operated system and test low power modes
- NXP NTAG203F – NFC Tag with field detection
- USB to Serial IC (enabling programming/communication)
- Schematics and gerber files are available freely after registration



Liberty

ROHM Bluetooth Smart Module ML7105-0X Development Kit

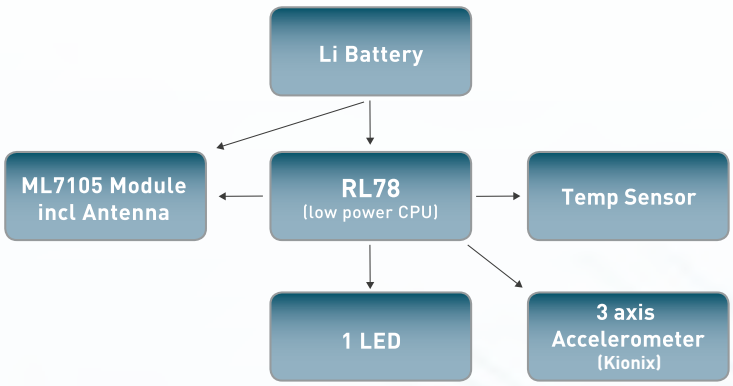
ArchiTech Liberty developed by ArchiTech and ROHM is a development board for creating ultra-low power Bluetooth Smart enabled applications.

Featuring the Ultra Low Power ROHM Bluetooth Smart Module ML7105-0X and Renesas MCU RL78, combined with Kionix accelerometer, Liberty is an easy to start development platform for smart connected devices. Software will be available under GPL.
Schematics and gerber files will be available after registration on ArchiTech website.

Hardware Features

- Small disc form factor (22 mm diameter)
- Battery operated by small Li battery
- ROHM Bluetooth Smart Module MK71050-02
  - Based on the ML7105 ic
  - Bluetooth® SIG Core Spec v4.0 compliant
  - Cortex-M0 Micro processor, it has interrupt controller and Sys-Tick Timer
  - UART interface for Bluetooth® Host Controller Interface (HCI)
  - SPI (Slave mode), I²C (Master & Slave) interface for EEPROM or Custom Host Controller Interface, GPIO
  - System Clock Timer and External Low Power Clock Timer
  - Wide operating Temperature -20 ...70 °C
  - Ultra Low Power RF block
    - Single power supply 1.6...3.6 V
    - Deep Sleep Mode below 0.7 uA (with external Low Power Clock)
    - Idle Mode below 3.0 mA
    - TX, RX mode below 9.0 mA

- Renesas RL78
  - 16-bit RL78 CPU Core
  - Ultra-Low Power Technology
    - 1.6...5.5 V operation from a single supply
    - Stop (RAM retained): 0.23 µA, (LVD enabled): 0.31 µA, Halt (RTC + LVD): 0.57 µA, Snooze: 0.70 mA (UART), 1.20 mA (ADC)
    - Operating: 66 µA/MHz
  - Data Flash Memory used to emulate EEPROM, 1 million cycles
  - Internal oscillator high-speed On-chip Oscillator 32 MHz with +/- 1% accuracy
  - Power-on reset (POR) monitor/generator
  - Lot of peripherals I^2C master, CSI/SPI (7-, 8-bit) ,UART (7-, 8-, 9-bit), Timers, ADC, On chip temperature sensor, GPIO 5 V tollerant
  - Real-time clock (RTC): 1 channel (full calendar and alarm function with watch correction function)
  - Safety and failure proof features (IEC or UL 60730 compliance)
    - Flash memory CRC calculation
    - RAM parity error check, RAM write protection
    - SFR write protection
    - Illegal memory access detection
    - Clock stop/ frequency detection
- Kionix Accelerometer KXTJ2-1009
  - Tri-axial 2g per axis, 14 bit max resolution
  - Very low active power 135 µA high sample speed, 10 µA low speed (25 Hz)
- Temperature sensor ROHM KXTJ2-1009
  - Low current consumption 4 µA
  - High accuracy
  - Small package 1,6 x 1,6 x 0,6 mm
  - With the help of ArchiTech Brooklyn, modules can be directly connected to the Freescale Tower without the need of an MCU expansion port



Identification

With the exponential development of smartphone sales, near-field communication and RFID technologies are seeing extremely rapid growth across several markets. Applications are very diverse and range from train tickets and travel passes to access control and contactless payment – to say nothing of the growing number of connectivity applications in our homes and cars.

This has led to increased demand for ready-to-use solutions to help embedded developers integrate NFC and/or RFID into their devices. This is where ArchiTech comes in. With our close connections to the industry and its major actors, SILICA provides a range of ArchiTech products that speed the implementation of smarter functions in tomorrow's devices.

The ArchiTech range of unique and exclusive development boards and kits give you the best of both worlds – proven technology from leading vendors along with expert advice and support from the ArchiTech team at SILICA. Together, we help you get your device to market faster and gain an edge over the competition.

Louvre

ArchiTech Louvre developed by ArchiTech and NXP highlights the benefits of NFC in embedded applications

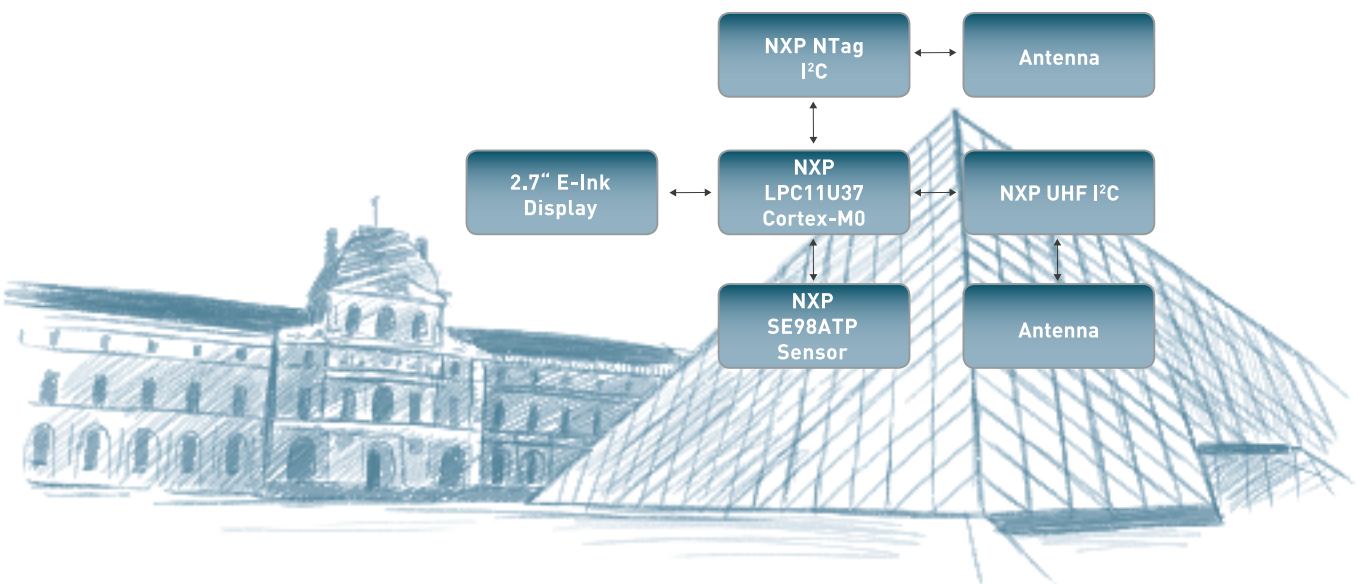
Powered by NXP NTAG I²C, NXP LPC11U37 ARM Cortex-M0 and including an e-ink display, it shows how easy it is to connect to NFC mobile phones to:

- Upgrade firmware
- Read sensors with no power
- Exchange data with the microcontroller

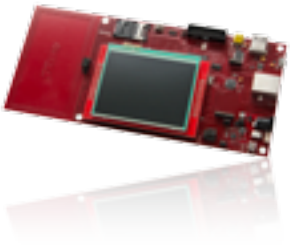
Software is available under GPL. Schematics and gerber files are available after registration on the ArchiTech website.

Louvre Hardware Features

- Small form factor
- NXP NTAG I²C
- NXP UHF I²C
- NXP Cortex-M0 LPC11U37 microcontroller
- 2.7" e-ink display
- SE98ATP temperature sensor
- Micro-USB connector
- Possibility to operate without battery
- Full size antenna to maximise energy harvesting
- Four capacitive buttons to enable user interaction
- Hardware Arduino Ready (headers connectors not provided)



Seriz II



Now available also in a bundle with the ArchiTech Babylon board!

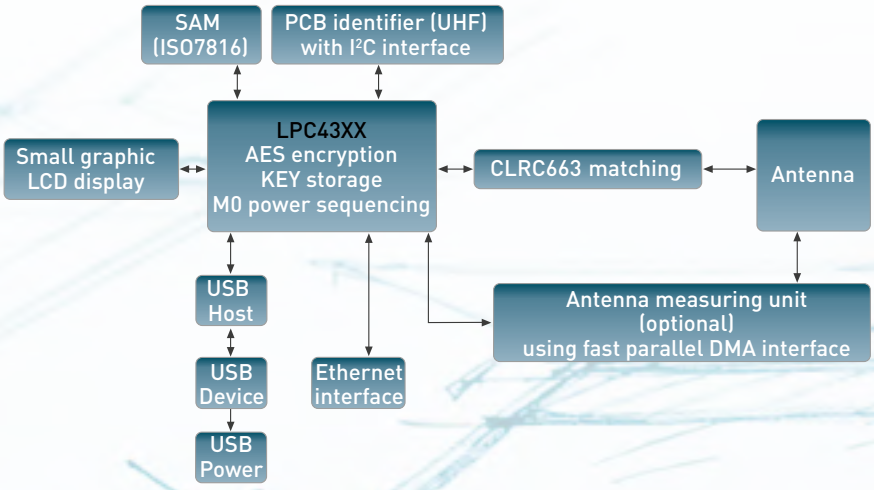
Built upon the success of Seriz, SILICA and NXP present the ArchiTech Seriz II Board, a rapid and secure RFID and NFC development. The development of RFID and NFC applications is being challenged due to the many different kinds of RFID tags on the market. Furthermore, some cards are becoming very complex as there is a growing need for security.
ArchiTech Seriz and ArchiTech Seriz II help customers migrate their existing RFID product to a more secure solution, add the benefits of NFC to their reader with almost no additional costs, thus making their development cycles faster and easier. Software sources, ready to be compiled with the LPCXpresso IDE from NXP, are provided and schematics are included in the kit.

Features

- NXP CLRC663 transceiver
- Comprehensive standard support
  - ISO 14443A/B
  - ISO 15693
  - NFC
- NXP LPC4350 ARM® Cortex™-M4
  - Key storage
  - Direct interface with ISO7816 SIM cards
  - M0 low power wake-up demo
- Color LCD display with GUI
- Ethernet
- UCODE I²C
- FreeRTOS application
- Project ready for free LPCXpresso environment

Applications

- Device customisation/ product configuration
- Firmware downloads
- Return management
- Counterfeit protection and authentication
- Production information
- Theft protection and deterrence
- Production automation



Babylon

Development Kit for NXP A70CM Authentication IC

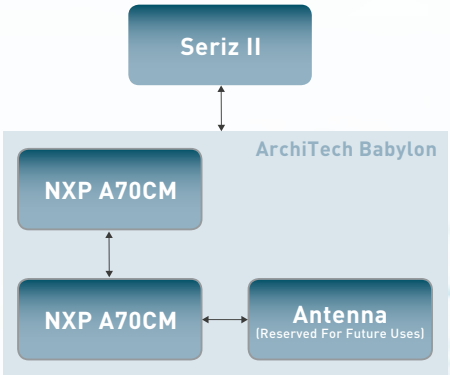
The ArchiTech Babylon is only available in a bundle with the ArchiTech Seriz II board.

ArchiTech Babylon, developed by ArchiTech and NXP, is a development board based on NXP Turnkey Security IC A70CM. In the world of Internet Of Things, connected systems are increasingly prone to security threats. This exposes device manufacturer and infrastructure owners to high financial risks and reputational damages.
The A70CM is built using State-of-the-Art tamper resistance techniques, both Hardware and Software, that makes it extremely difficult for hackers to extract or modify secrets and keys stored on the security IC.

ArchiTech Babylon lets customers start developing embedded secure applications with the state of the art technology. Software will be available under GPL.
Schematics and gerber files will be available after registration on the ArchiTech website.
The ArchiTech Babylon is only available in a bundle with the ArchiTech Seriz II board.
Ordering Code: BAEBABYLON

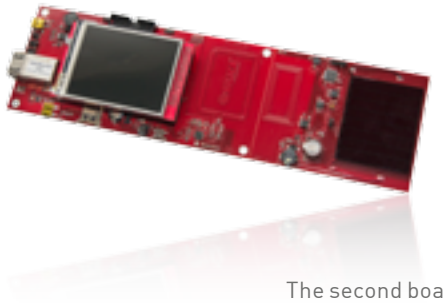
Key Features

- ArchiTech Babylon Hardware:
  - It is an expansion board for the Seriz II board
  - Providing 2 x NXP A70CM Authentication ICs
- ArchiTech Babylon Software:
  - Single Board Demo – Simulating data exchange on a single ArchiTech Babylon board
  - Two Boards Demo – Simulating data exchange between two ArchiTech Babylon boards
  - PC Software
- NXP A70CM features:
  - Built on A700x NXP Security IC featuring state-of-the art Tamper Resistance technology
  - Signature generation and verification
  - RSA encryption/decryption
  - AES 128/256 bits encryption/ decryption, large key store
  - Factory Key pre-injection in certified (Common Criteria) secure environment
  - On chip key generation
  - Secure key management
  - Device Life Cycle Management
  - 100 Kbits/sec slave I^2C interface
  - -25...+85 °C (A7001CMHN1), -40...+90 °C (A7002CMHN1) operational ambient temperature HVQFN32 package



PoRfid

Developed by SILICA and STMicroelectronics, ArchiTech PoRfid is a complete solution for developing RFID and NFC applications in the embedded market.



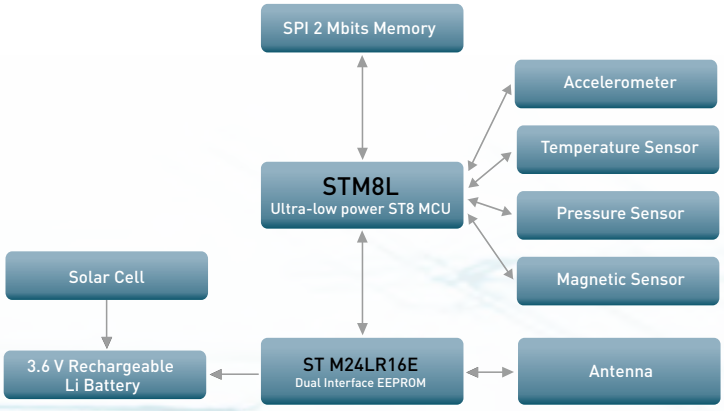
PoRfid is a kit including two boards:

The first board is working as datalogger, equipped with temperature, pressure, and accelerometer sensors. It is powered by battery, rechargeable by solar cell and/or RF Field. Data will be recorded in the ST M24LR16E Dual Interface EEPROM, a memory that can be read also from an RFID reader, including NFC mobile phones.

The second board is working as RFID reader and is powered by the new NFC/RFID transceiver CR95HF from STMicroelectronics. It demonstrates how it is easy to develop a reader able to read/write the Dual Interface EEPROM. The board enables developers to create devices which can be configured (read, written) wireless, even when they are not powered. Schematics and gerber files are available online freely after registration.

Features Datalogger Board

- Powered by STM8L, ultra-low power ST8 8-bit MCU
- Dual EEPROM M24LR16E, 16 Kbits (with energy harvesting) from STMicroelectronics
- 2 Mbits SPI Memory ST 95M02
- Accelerometer, temperature, pressure and magnetic sensors
- Solar panel
- 3.6 V rechargeable Li battery



Features RFID Reader Board

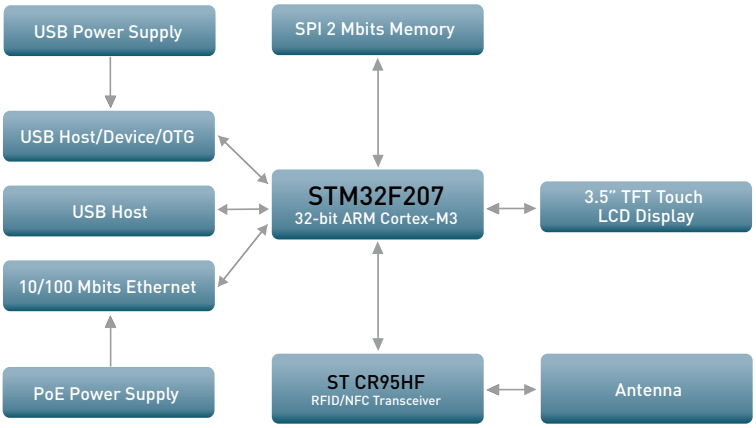
- ARM Cortex-M3 MCU STM32F207
- CR95HF 13.56 MHz RFID/NFC transceiver
- USB port (Device/Host/OTG)
- Ethernet 10/100 port with POE (not insulated)
- 2 Mbits SPI memory ST 95M02
- 3.5" 320 x 240 TFT LCD touch display

Software - Graphical GUI demo

- Wireless configuration of the datalogger board (like sensor sampling frequency)
- Graphical display of logged data
- Web server simple demo

Sources are available and provided as

- Atollic 3.0 project files
- Atollic is an Eclipse based ID available for trial for 30 days



Brooklyn

Bridging Maxim's Pmod™ compatible peripheral modules to the Freescale Tower System

ArchiTech Brooklyn is an adapter to connect Maxim Integrated's Pmod™-compatible plug-in peripheral modules to the Freescale Tower System. Brooklyn has been tested with all 15 of Maxim's peripheral modules and comes with the original Maxim software examples ported to MQX™ RTOS for Freescale's Kinetis K70 family (32-bit low-power MCUs with ARM® Cortex™-M4 core). Brooklyn is adding even more flexibility to the already versatile Freescale Tower, enabling you to enhance your design with new features in no time. The Brooklyn adapter card, Maxim's collection of peripheral modules and Kinetis MCU Tower are all sold individually. Schematics and gerber files are available online freely after registration.

Freescale Tower System Benefits

- The Freescale Tower is a modular development platform that saves you months of development time, now and in the future, through rapid prototyping and tool re-use
- Interchangeable and reusable modules along with open source design files make it easy to customize your design and reduce low level design giving you more time to focus on differentiated solutions
- Sold in kits or as individual modules, the expansion of your Tower System from a development tool into a development platform is simple and cost effective

Maxim peripheral modules communicate with system boards using 6 or 12-pin connectors

- Maxim peripheral modules are small I/O interface boards that offer a variety of analog and mixed-signal functions to extend the capabilities of your board
- Maxim is providing a world of possibilities with 15 Pmod™ compatible devices (Pmod™ is a trademark of Digilent, Inc.)
- Features, such as precision data conversion, high-accuracy timekeeping, and advanced functions like ambient-light sensing can be easily added to your board through Maxim modules
- With the help of ArchiTech Brooklyn, modules can be directly connected to the Freescale Tower without the need of an MCU expansion port

Build Your System in 3 Easy Steps

1. Choose a Freescale Kinetis MCU
2. Choose a Maxim peripheral module and insert it onto the Brooklyn
3. Connect Freescale processor module and SILICA Brooklyn to the elevator boards

MAX11205PMB1#
Precision 16-Bit ADC

DS1086LPMB1#
Programmable Oscillator

MAX5216PMB1#
Precision 16-Bit DAC

MAX4824PMB1#
Octal Relay Driver

MAX3232PMB1#
RS-232 Transceiver

MAX44000PMB1#
Proximity Detector

MAX5487PMB1#
Dual Nonvolatile Digital Pot

MAX14840EPMB1#
RS-485 Transceiver

MAX31723PMB1#
Temperature Sensor/Switch

MAX7304PMB1#
16-Port I/O Expander

MAX9611PMB1#
Programmable Current Limiter

MAX31855PMB1#
Thermocouple to Digital

DS3231MPMB1#
3PPM Real-Time Clock (RTC)

MAX14850PMB1#
SPI/UART Isolator

MAX5825PMB1#
Octal 12-Bit DAC

ArchiTech Gizeh Software Add-on

PIXI (MAX11300) support for Brooklyn has been added.
More information at www.maximintegrated.com

Tusa

NXP CLRC663 Daughter Board for LPCXpresso/mbed Boards

ArchiTech Tusa is a quick, easy, low cost yet effective option to start developing with the new NXP CLRC663 RFID/NFC transceiver IC. CLRC663 is a highly integrated transceiver IC for contactless communication at 13.56 MHz featuring:

- High Power RF front-end IC operating at 3.3 V and 5 V
- Fully ISO/IEC 14443 A & B, ISO/IEC 15693 and FeliCa compliant
- ISO/NFC 18092 NFC-IP1 Peer-to-Peer support (Initiator Mode)
- High Baud Rates (up to 848 kbits)
- Low Power Card Detection

Schematics and gerber files are available online freely after registration.

Two software development environments are supported:

- NXP LPCXpresso
- NXP mbed

Software Development - LPCXpresso

- LPCXpresso™ is a, low-cost development platform available from NXP. It supports NXP's ARM-based LPC microcontrollers. The platform is comprised of a simplified Eclipse-based IDE and low-cost target boards which include an attached JTAG debugger.
- The LPCXpresso target boards, jointly developed by NXP, Code Red, and Embedded Artists, include an integrated JTAG debugger, so there's no need for a separate JTAG debug probe.

The Silica Tusa daughterboard fits on LPCXpresso target boards. Software sources are provided as LPCXpresso project files.

Software Development - mbed

mbed is a tool for Rapid Prototyping with Microcontrollers. mbed is formed by:

- mbed microcontrollers, a series of microcontrollers development boards designed for fast, flexible and low-risk and professional rapid prototyping.
  - Packaged as a small 40-pin 0.1" DIP form-factor convenient for prototyping with solderless breadboard, stripboard, and through-hole PCBs.
  - Include a built-in USB programming interface that is as simple as using a USB Flash Drive. Plug it in, drop on an ARM program binary, and its up and running!
- Online IDE, accessible with browser
  - The mbed Compiler provides a lightweight online C/C++ IDE that is pre-configured to let you quickly write programs and compile and download them to run on your mbed microcontroller.
- Silica Tusa can be attached to mbed microcontrollers to enable development of RFID/NFC application on mbed platform

More information on LPCXpresso are available at **http://ics.nxp.com/lpcx-presso/**

More information on mbed is available at **http://mbed.org/handbook/mbed-Compiler**

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