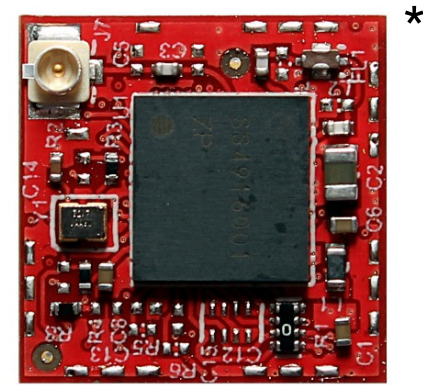
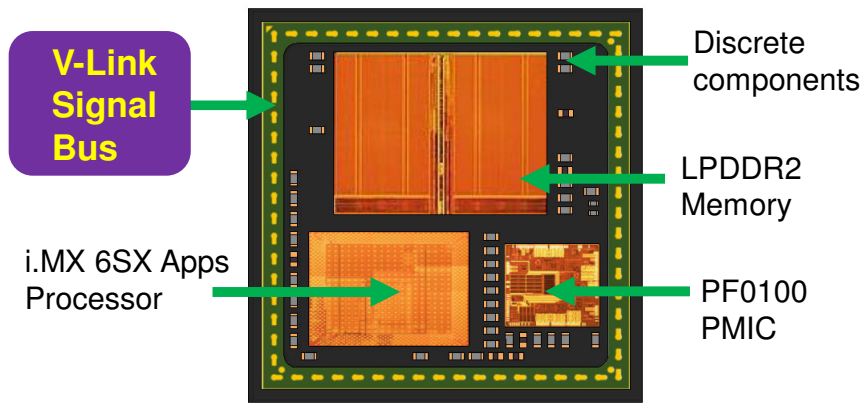


Family 3 SCM-i.MX 6SX V-Link (15.5mm x 15.5mm)

Available ALPHA

NXP Base SCM

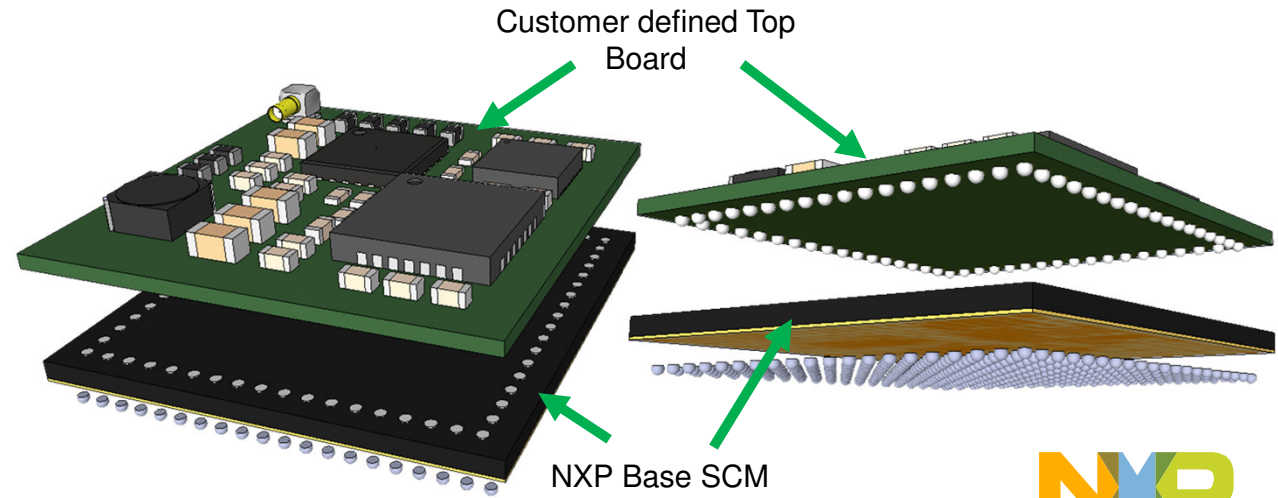


Custom Top Board (PCB or Substrate Based):

- RF, Sensors, Battery mgmt., PHY interface, Audio Codex, etc

0.75mm Ball pitch

BSP released
Enabled for Linux



* SCM shown with CODE WiFi/BT Top Board

PARTNER DEMOS

UTILIZING SCM-I.MX 6SX V-LINK



CODE

PHALANX ULTRA-COMPACT BORDER ROUTER

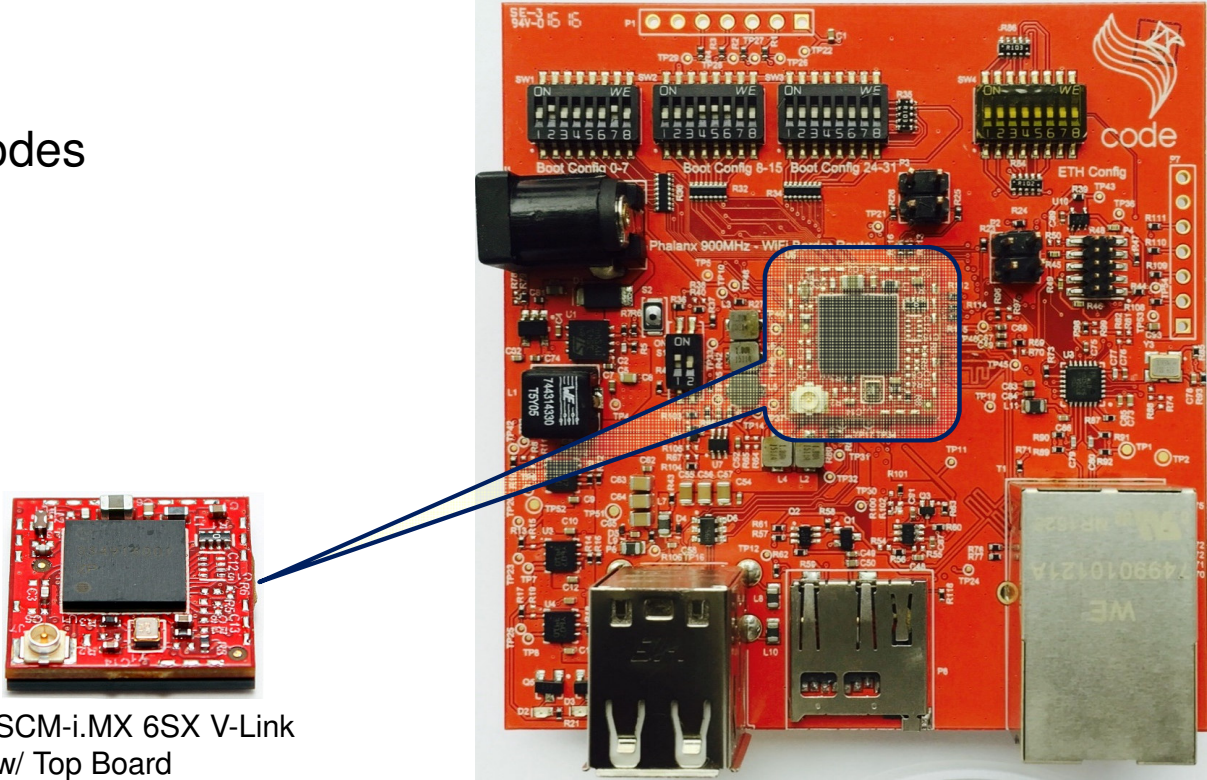


Sub-GHz Wireless Mesh Networks using SCM-i.MX 6SX V-Link

- **Ultra Compact Sub-GHz to WiFi Border Router solution**

- **Applications:**

- Home Automation
- Wireless Sensor Nodes
- Smart Lighting
- Smart City
- Smart Meters
- Smart Parking
- IoT



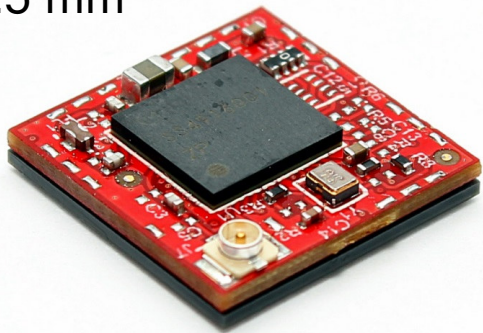
SCM-i.MX 6SX V-Link
w/ Top Board



Phalanx Ultra-Compact Border Router

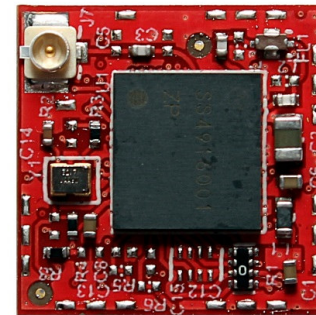
- **Top Board**

- 2.4 GHz & 5 GHz WiFi/BT 4.0 + EDR
- 802.11 a/b/g/n/ac
- Up to 390 Mbps
- U.FL standard antenna connector
- Broadcom BCM4339 Chipset
- SCM-i.MX 6SX V-Link Top Board form factor
- 15.5 x 15.5 mm



- **Phalanx Border Router**

- Optimized mesh network for sensing and control applications
- Highly scalable, minimizing deployment costs
- 900 MHz Wireless
- A new, clever routing algorithm which reduces routing overhead.
- Fully IPv6



Design Process

Conceptualization

- The SCM-i.MX 6SX V-Link is one of the most capable yet compact application processor platforms. We envisioned using this platform to open a wide range of IoT possibilities.

Design

- SCM-i.MX 6SX V-Link, presents the right choice of buses and IOMUX options which made the design straightforward. Our schematic and PCB capture time was less than 2 weeks of effort.
- V-Link technology allowed us to route all the needed connections easily and within electrical specs.

Design Process

Prototyping and Testing

- Top Board PCB is highly flexible, it was a pleasant surprise to find that all our components fitted nicely in the design.
- Testing was quite easy with all the software provided by NXP.

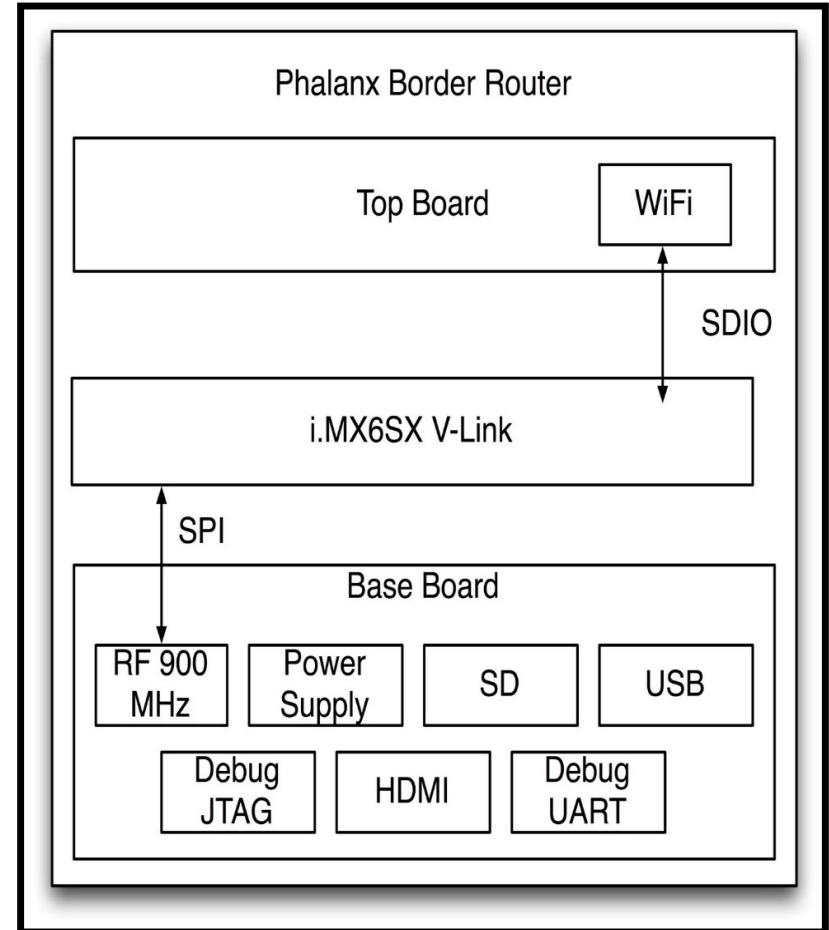
Design Cycle time

- In just 2 months the whole solution was up and running, including software porting, PCB layout, manufacturing and assembly.
- The exceptional level of integration provided by this new NXP platform enabled us to add extra features to the design such as last generation 802.11 ac WiFi a conventional approach would have taken us around 4 to 6 months.
- Thus, we have reduced time to market by up to 4 months.

Summary

Benefits

- Ultra compact, ready to deploy IoT Top Board solution
- High level of hardware and software integration enables customers with a powerful solution and a very short time to market
- Phalanx software provides powerful low latency IoT IPv6 mesh technology





SECURE CONNECTIONS
FOR A SMARTER WORLD

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