

A Brief Survey through Genode's ARMv8 Playground



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Outline

1. Introduction

2. Genode Embedded Prospects

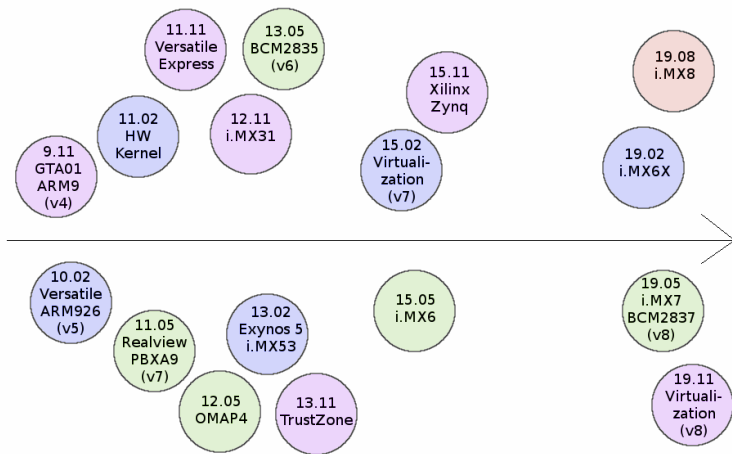
- Kiosk System
- IoT Gateway
- Industry control system

3. Roadmap 2020



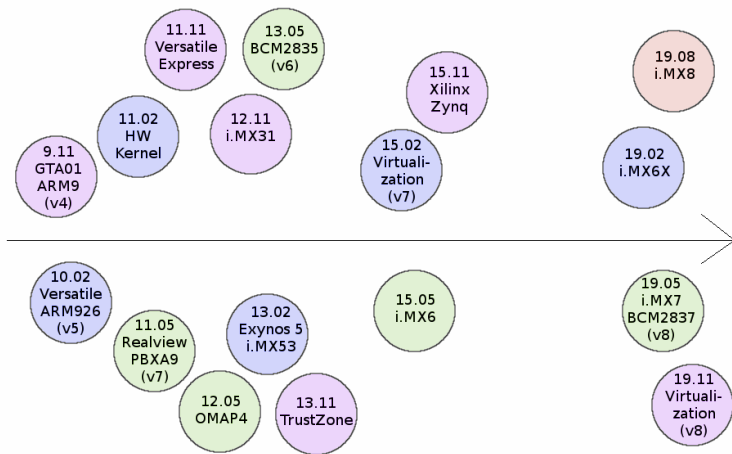


History of Genode on ARM





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FYI: <https://genodians.org/nfeske/2019-11-20-arm-soc-landscape>

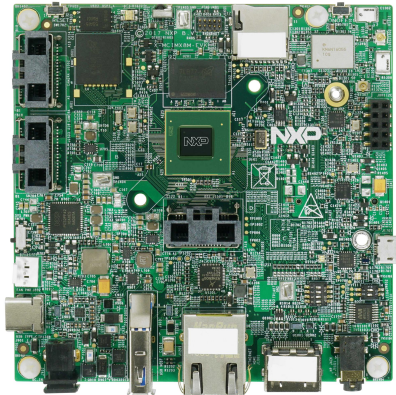


Open Source needs Open Hardware





Demonstrator



NXP i.MX 8M Evaluation Kit





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Display Panel



Wannacry-Attack at Deutsche Bahn

(Photo: Martin Wiesner)



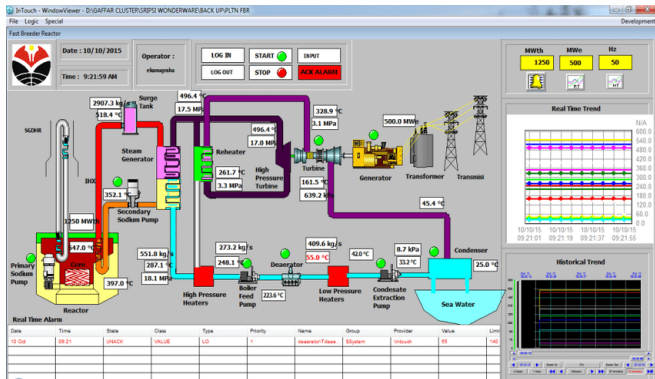
Partial Update



i.MX-based IoT Gateway from Compulab



Business specific Legacy Application



Interface of SCADA system simulator

(Picture: Eka Nugraha, Ade Gafar Abdullah, Dessy Hakim)



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Roadmap 2020

- Sculpt i.MX 8M on MNT Reform
- Platform Driver
- Extended Virtio Support for VMM
- Hardware-accelerated Graphics





References

Demo branch

<https://github.com/skalk/genode/tree/fosdem>

MNT Reform

<https://mntre.com>

USB Armory

<https://inversepath.com/usbarmory>





Thank you!

Q&A

