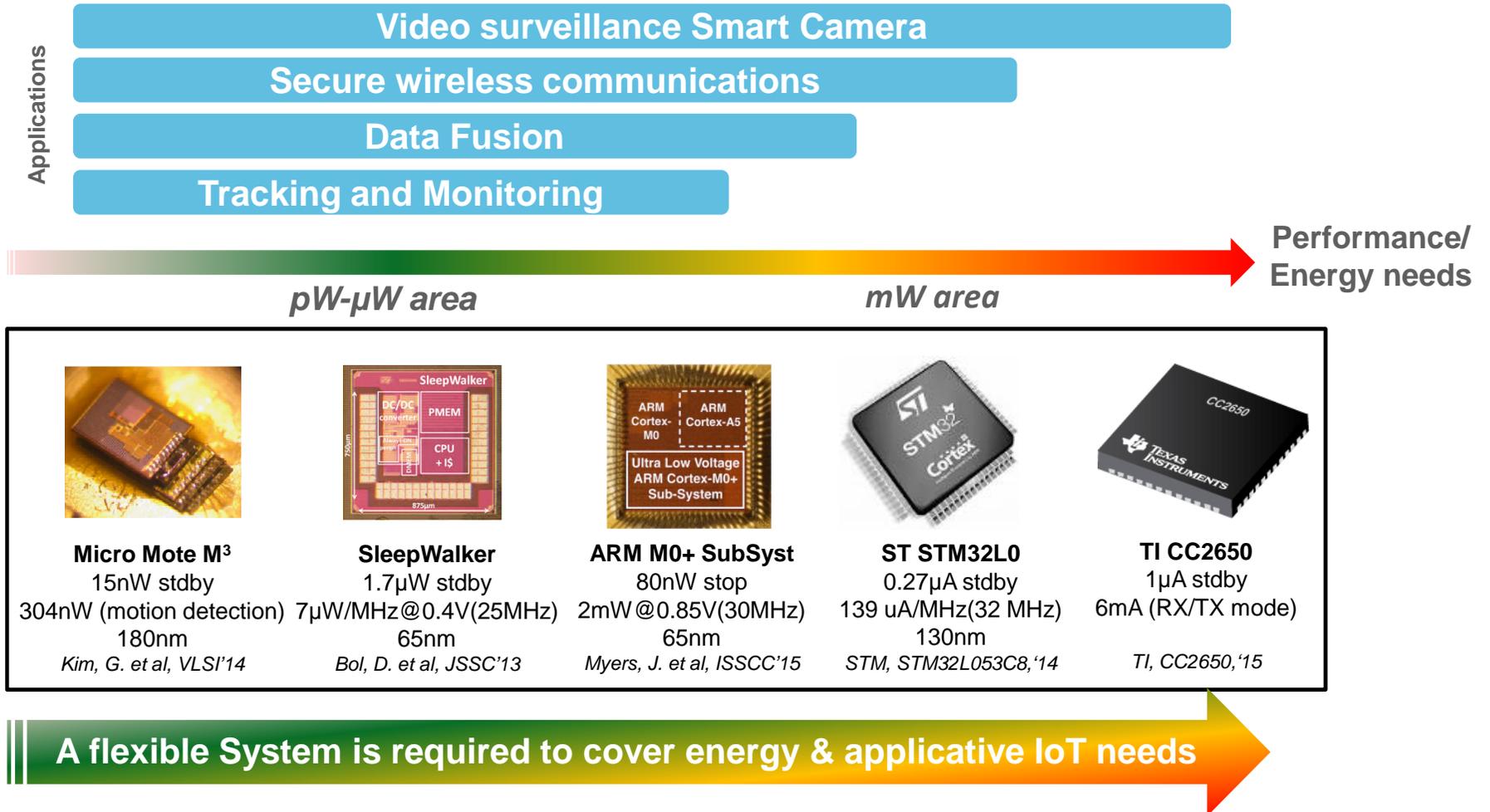


L-IOT: a Flexible Energy Efficient Platform Targeting Wide Range IoT Applications

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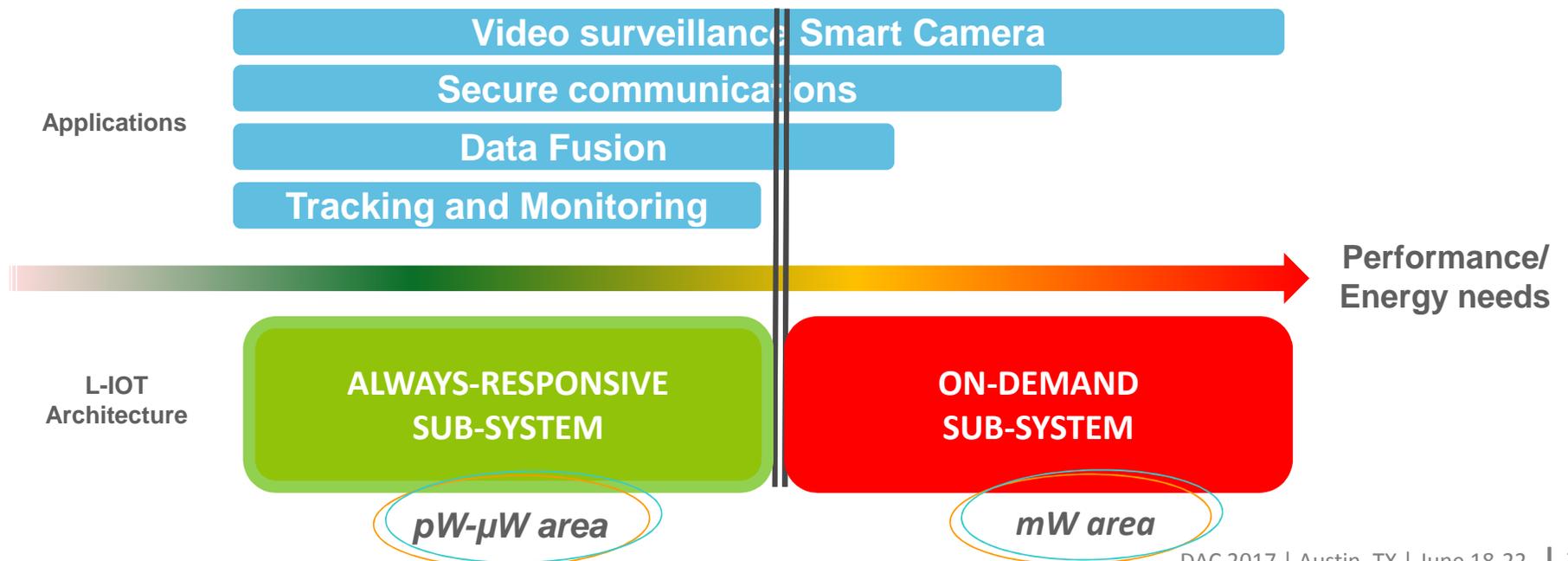
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IoT applications: a wide range of performance and energy needs

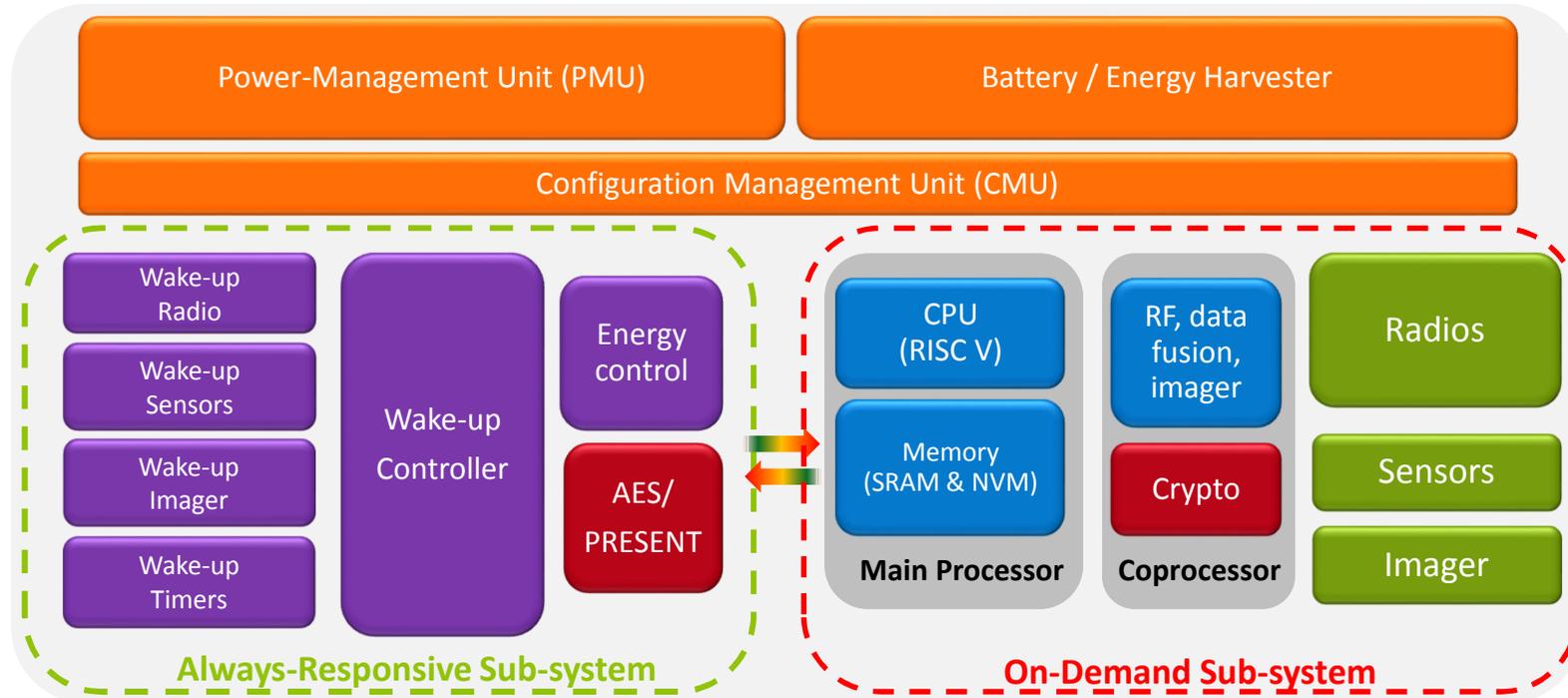


L-IoT : a flexible platform targeting high energy efficiency

- A flexible and fully integrated platform covering a wide range of performance and energy needs required by IoT applications
- Architecture : Always-Responsive/On-Demand partitioning
- Design : Ultra low power and adaptive IP blocks (analog/digital)
- Technology : FDSOI 28 nm technology brings more flexibility (V_{BB})

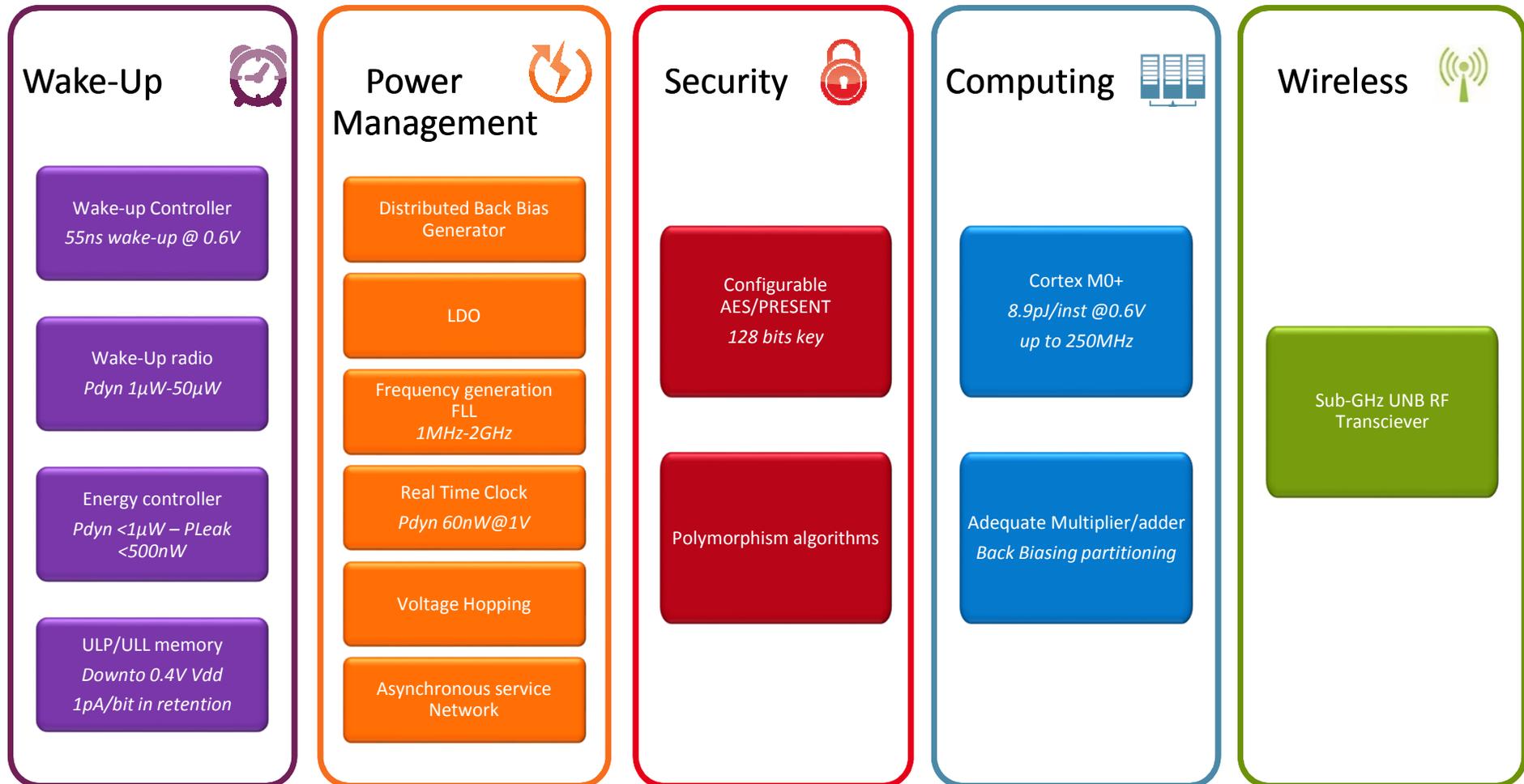


L-IoT : Detailed architecture and main characteristics



- Advanced Wake-up features : radio, imager, sensors, timers - controlled by an asynchronous Wake-up processor
- Advanced co-processing for image and radio digital Base Band
- Adaptive security features for authentication, identification and cryptography
- Efficient Power and Configuration units - asynch energy controller

L-IoT : available HW and SW IPs



Summary

- A flexible platform suitable for a fragmented IoT market and variable performance/energy needs
 - Architecture partitioned into wake-up and on-demand sub-systems
 - Ultra fast wake-up features
 - Ultra low power and adaptive mixed-signal IPs available
- Ultra low energy and adaptivity are key technologies provided by L-IoT
- Mixed-signal circuit integration and global optimization in FDSOI 28nm technology

Acknowledgements & references

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