



The fastest IoT business enabler

MICROEJ FOR



**Kinetis**  
Microcontrollers



**Vybrid**  
Controller  
Solutions

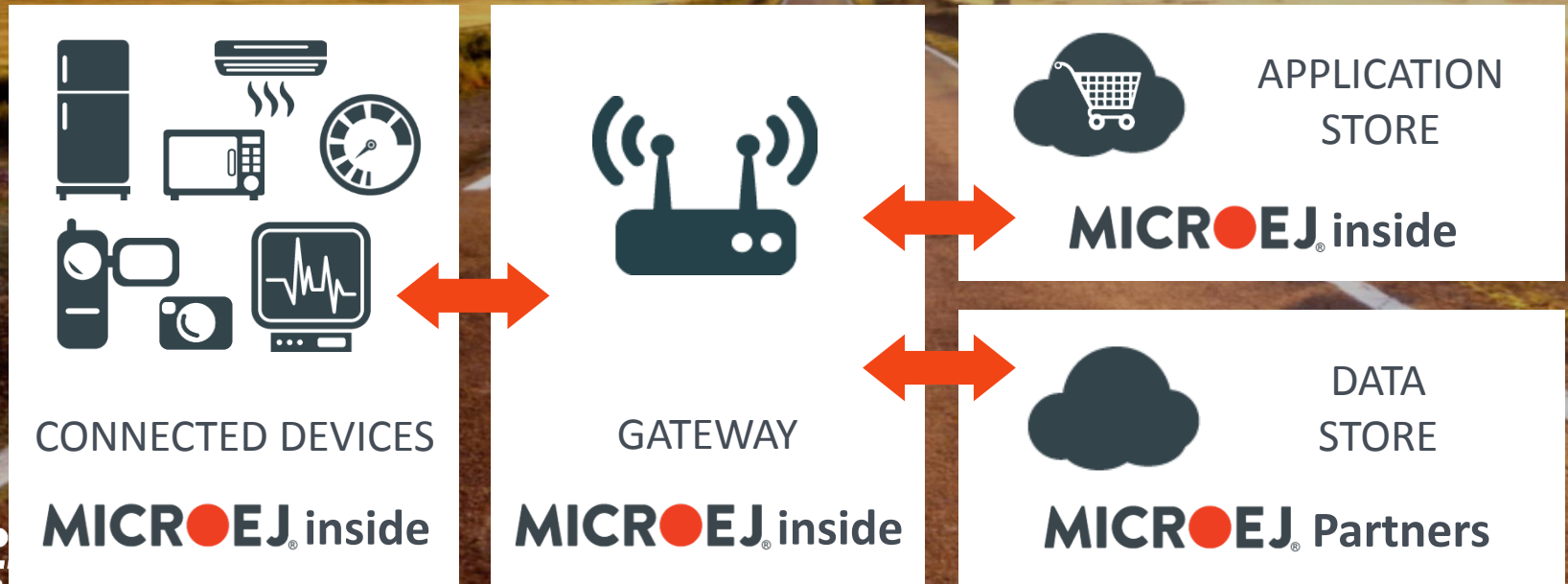


**i.MX**  
Applications  
Processors

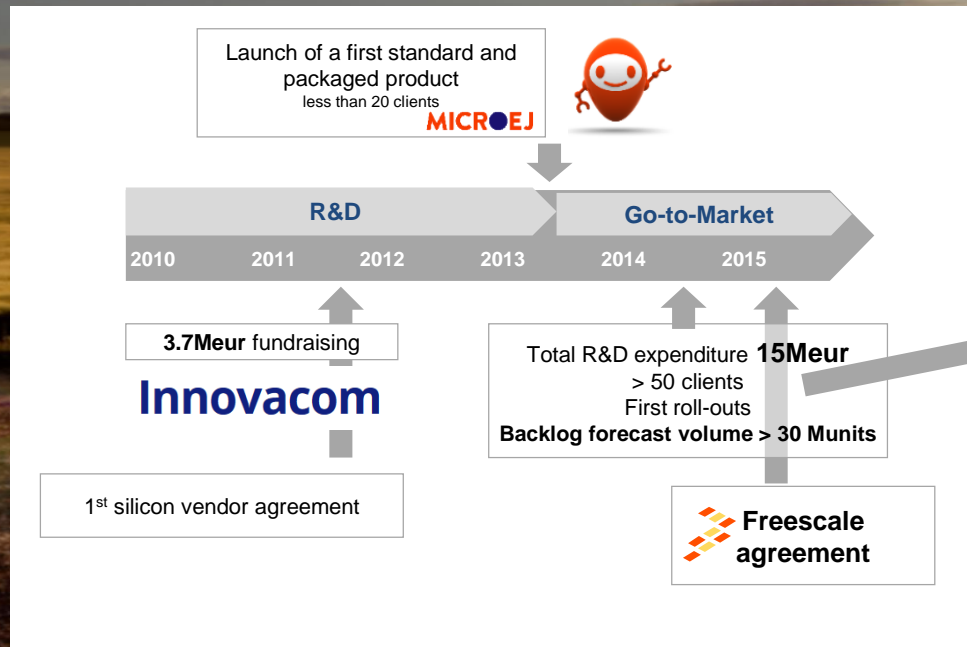


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# MICROEJ Software Platform



# A bit of History



# FOR NEW IOT DEVICES & SERVICES



CONSUMER  
ELECTRONICS



WEARABLES



INDUSTRIAL  
AUTOMATION



HEALTHCARE



AUTOMOTIVE

# A TYPICAL USE CASE - WEARABLE ELECTRONICS

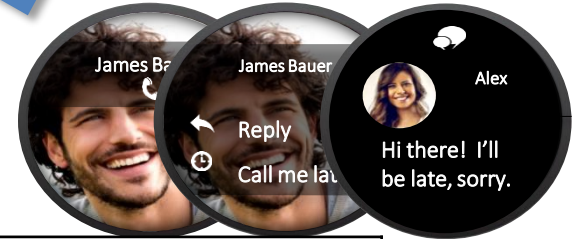
63% off on Bill of Material  
87% power consumption savings



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android wear



<b>Power</b>
<b>Processor</b>
<b>RAM</b> (data)
<b>FLASH</b> (Code + Resources)
<b>Boot Time</b>

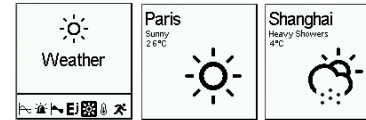
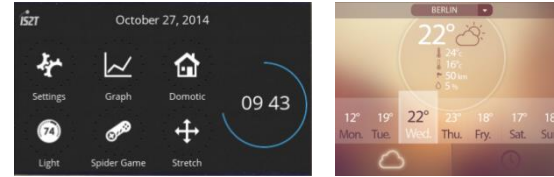
RTOS (Linux) + Java	
	410 mAh – batteries rechargeable every day
	Qualcomm Snapdragon 400 MSM8226, ARM 7-based Quadcore 1.2 GHz
	256 MB
	2 GB
	35 s

RTOS (Any) + Java	
	Batteries rechargeable every week
	ARM Cortex-M4 based MCU, 120 MHz
	Less than 0.5 MB
	2 MB
	50 ms

# GUI – MICROEJ EMBEDDED UI

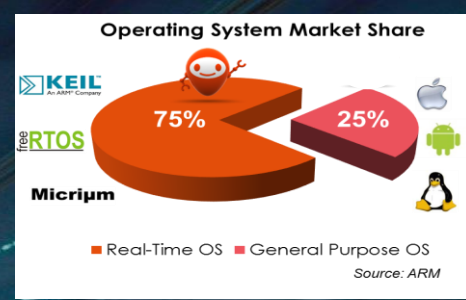
- Example – Area Chart
  - Kinetis K70 (M4)
  - 32-bit col. WQVGA, touch
  - 50 frames/s,
  - 2ms boot-time
- Memory requirements

	FLASH	RAM
	161 KB	11 KB
MicroEJ processor	28 KB	1 KB
MicroEJ GUI Platform	114 KB	5 KB
Area chart application	19 KB	5 KB



- GUI Libraries
  - Front panel designer
  - Widget examples
  - Fonts
  - Transitions, etc.

# FOR ALL PRODUCTS





**SCALABILITY**



**SECURITY**



**REMOTE  
MANAGEMENT**



**ADD OF NEW  
SERVICES**



**CODE  
REUSE**



**LOW POWER  
CONSUMPTION**





## CONTROL OVER BOM

- ✓ One platform for a wide range of HW and RTOS
- ✓ No oversized hardware



## -50% SHORTER TIME-TO-MARKET

- ✓ Simulation
- ✓ Fast prototyping
- ✓ Reduced QA cycles



## INCREASED MARKET REACH

- ✓ Add of new services to device
- ✓ Enhanced User Experience
- ✓ Extended product lifecycle

A person is sitting at a desk, interacting with a tablet. A laptop is open to the right, and a smartphone is on the desk. The scene is lit by natural light from a window in the background.

# MICROEJ

LEVERAGES A

POWERFUL AND

COMPREHENSIVE ECOSYSTEM

## CUSTOMER APPLICATIONS ( C / JAVA / ASM )

**MICROEJ**<sup>®</sup>

C/C++  
PLUG

SMART RAM  
OPTIMIZER

FILE  
SYSTEM

USER  
INTERFACE

VOCAL  
CONTROL

NUMERICAL

STORE  
ACCESS  
BROWSER

VIRTUAL  
ENGINE

EMBEDDED  
DEVICE API

RTOS

ETHERNET

USB / ...

WIRELESS

WI-FI

BLUETOOTH

SUB GIGA

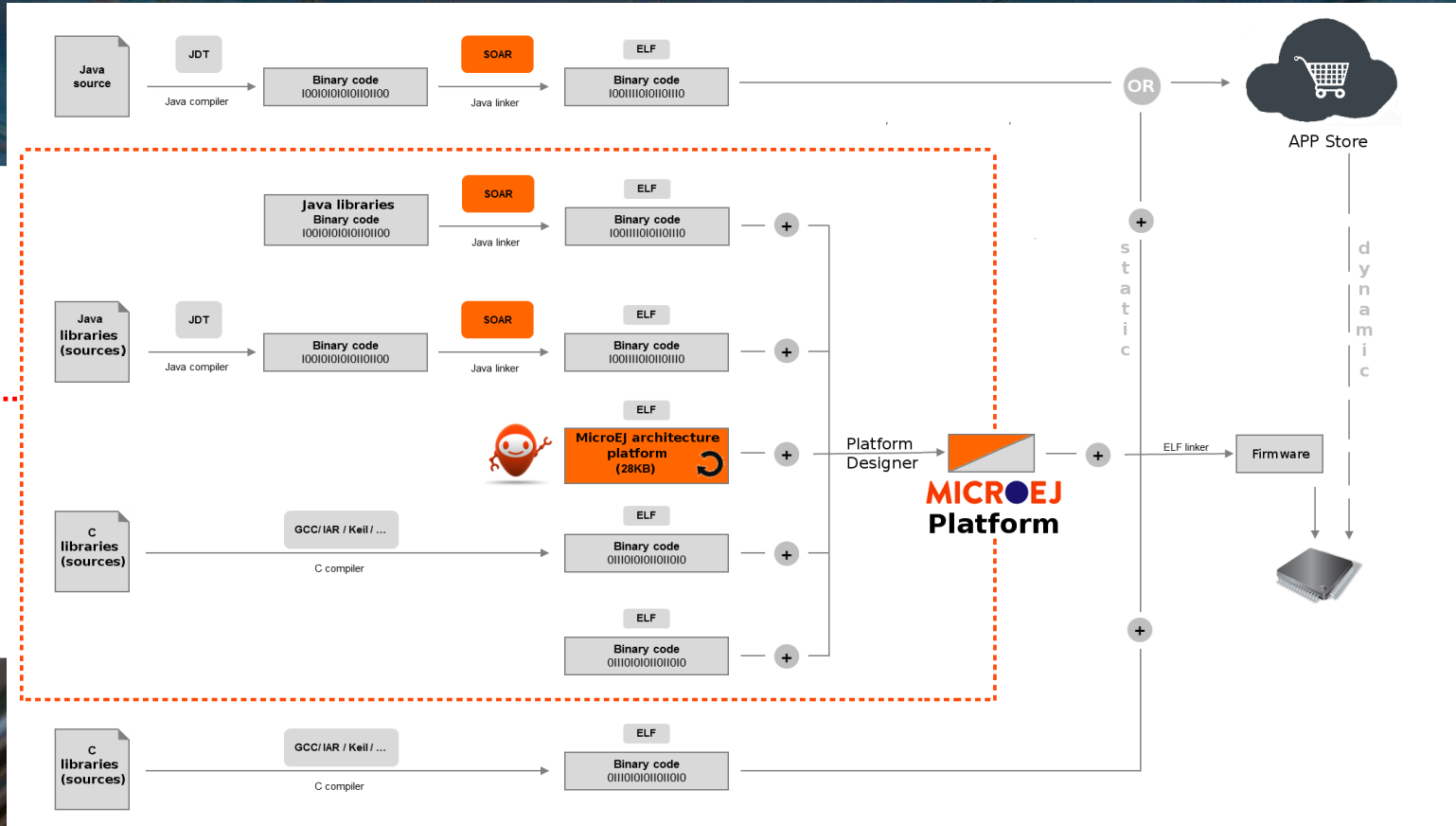
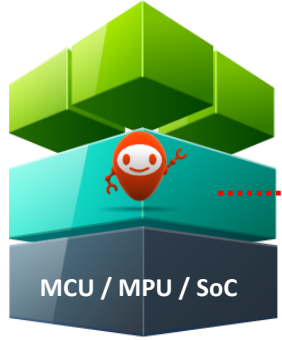
LOW LEVEL DRIVERS (BSP)

MCU / MPU / SoC

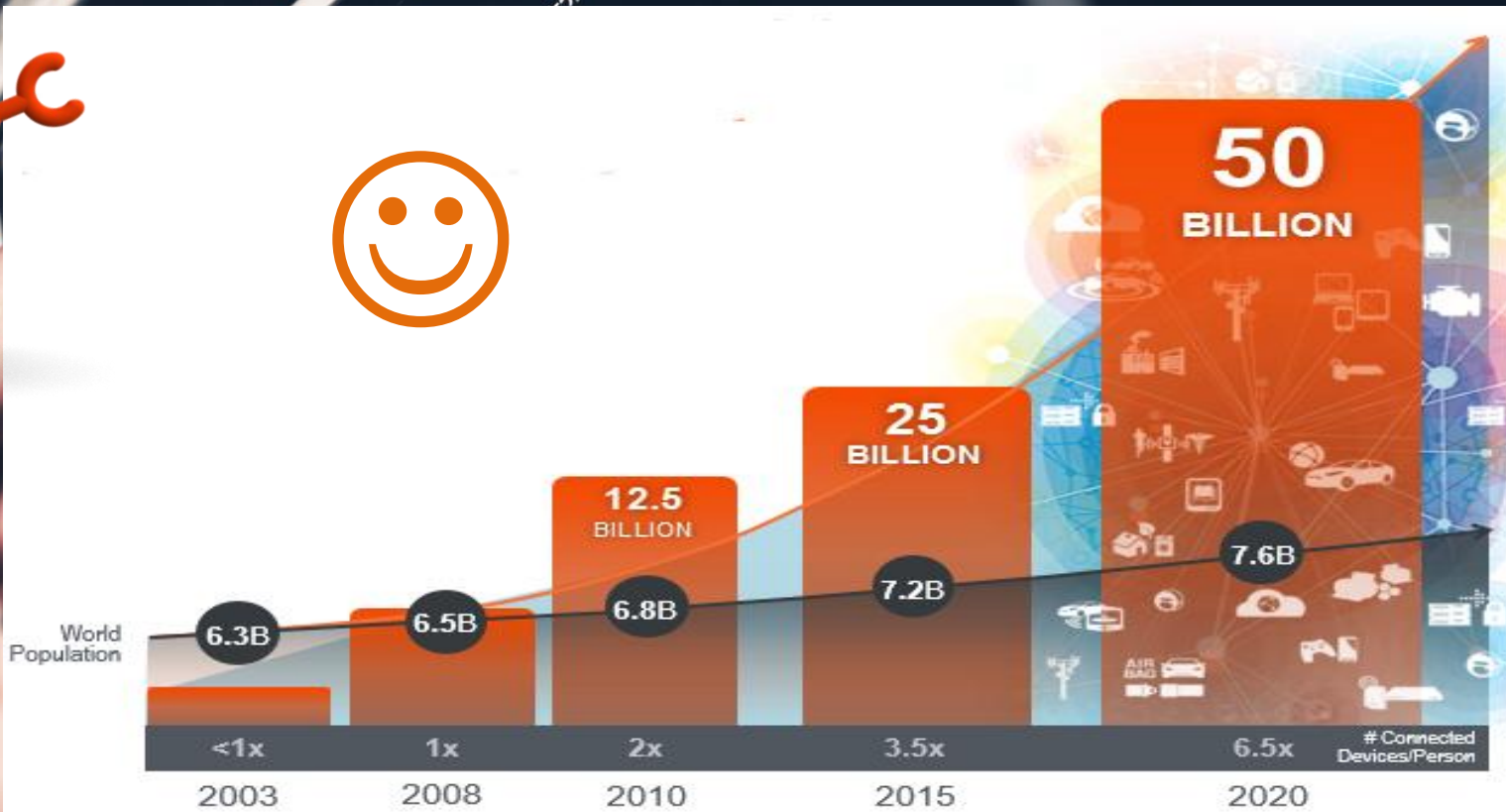
# STANDARD LIBRARIES FOOTPRINT

	Min	Typical	Max
» Core	14.9K	40.0K	140.7K
» Log	1.5K	1.5K	2.5K
» CJ-PLUG	2.0K	2.5K	4.5K
» ECOM	4.5K	10.5K	23.1K
» Wadapps	3.3K	17.1K	24.3K
» UI	12.1K	50.0K	181.3K
» MQTT	41.2K	42.3K	49.2K
» Eclasspath	0.0K	35.0K	97.3K
» NET*	20.1K	20.1K	25.1K

# STANDARD GENERATION FLOW



# WHY MICROEJ ?



# DETECTING SWEET BUSINESS SPOTS

**If you want to significantly increase productivity...**

**If you have “brand issue” across several products line ...**

**If you want “Android” but cannot afford the B.O.M ...**

**If you want a software components/Apps store ...**

**If you want to create an safe and reliable (open or close) ecosystem...**

**If you want to simulate first your next device functionalities...**

**If you have several IoT protocols/comm to address...**

**If you yours marketing and R&D teams fight ...**

**If you need an integrated software platform that includes User Interface, Numeric, Sensor, Low Power, Smart RAM optimizer, ...**



[microej@freescale.com](mailto:microej@freescale.com)

[sales@is2t.com](mailto:sales@is2t.com)



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