



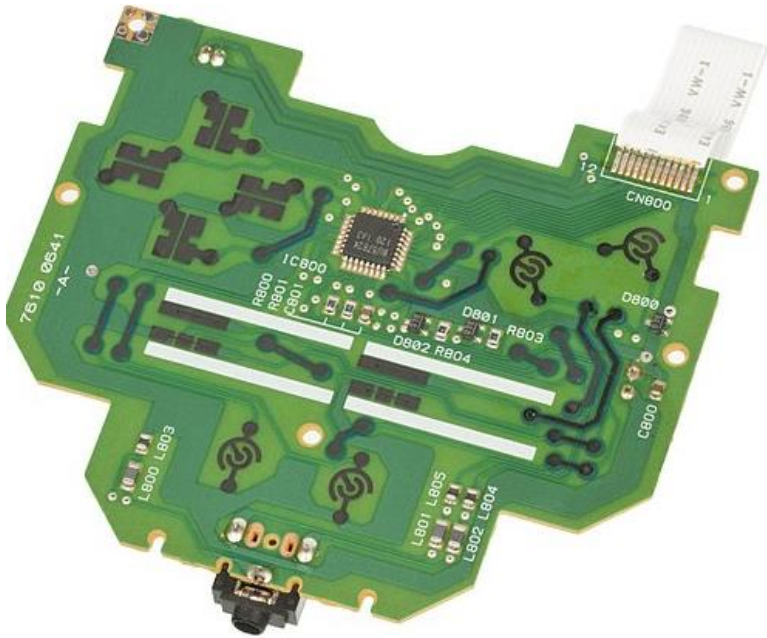
MATER
DYNAMICS



Internet of Things

30.7 B devices

These “things” are...



Electronic
ONLY

6.6

IOT-connected





300K
items per day



The background is a dark blue field filled with a complex network of small, light gray dots connected by thin, light gray lines. The network is denser on the left side, where it forms a thick, curved band, and becomes sparser towards the right. The overall effect is a sense of a vast, interconnected digital space.

THINGS for the Internet



Glass • Textile • Plastic • Paper

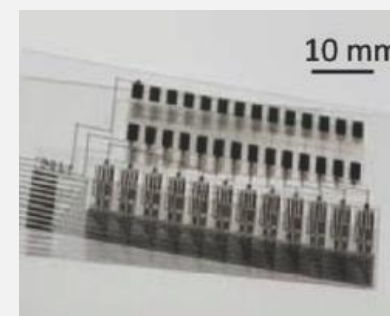
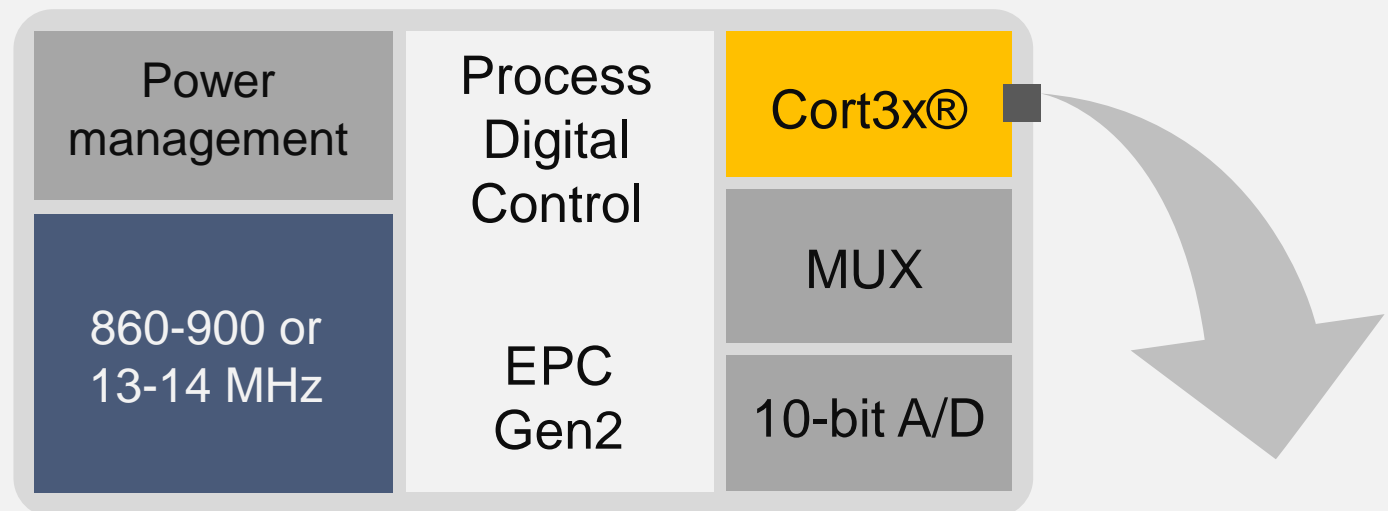
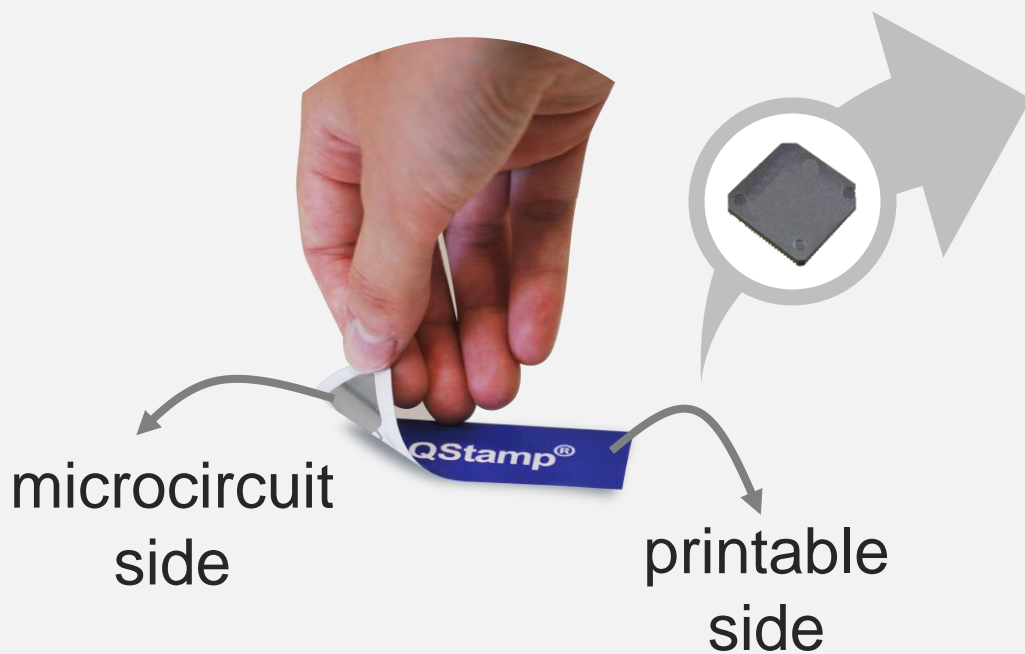


QStamp®
printed
nanocomposites

+

Cort3x®
signal
processing AI

OUR TECHNOLOGY



- .temperature
- .humidity
- .light
- .VOCs

HOW IT WORKS

Application



Operation at **UHF** and **HF**

Connectivity



Common gateways

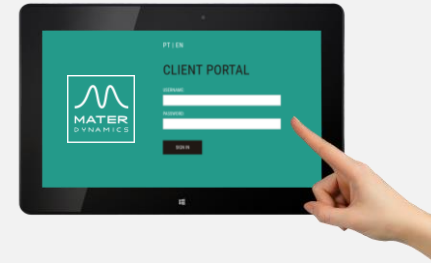
HOW IT WORKS

Reporting

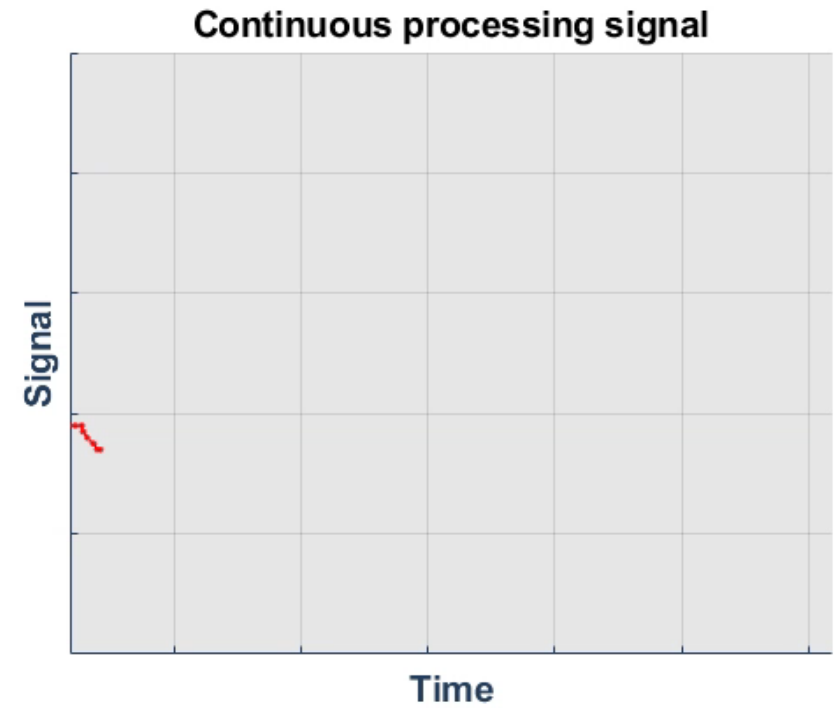


3

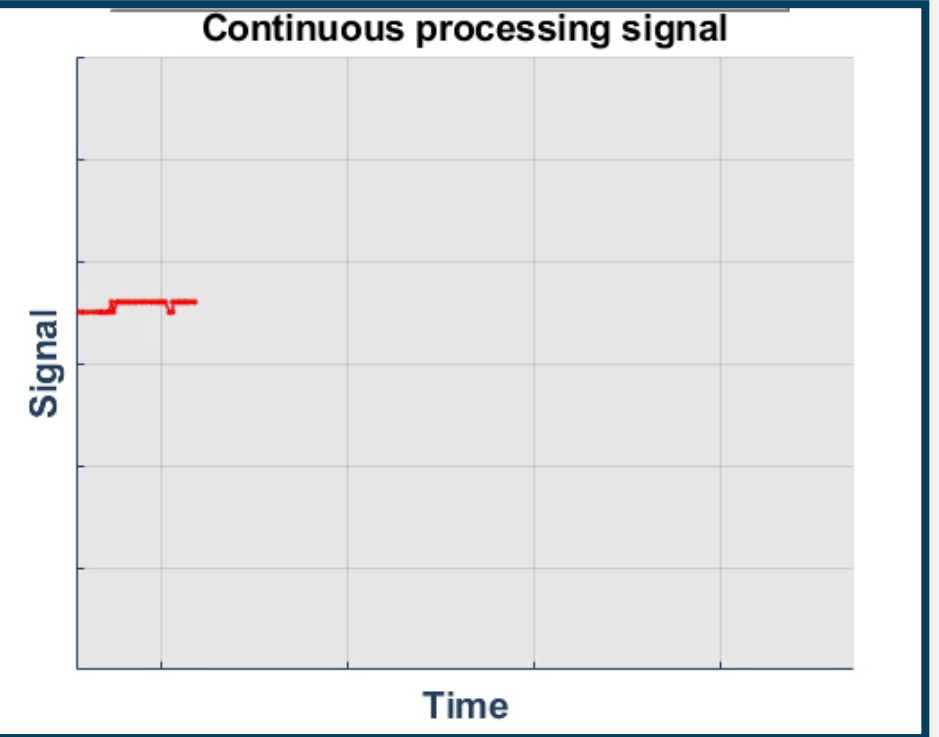
api.materdynamics.com



VIDEO 1



VIDEO 2







Jun-1
9:32 a.m.



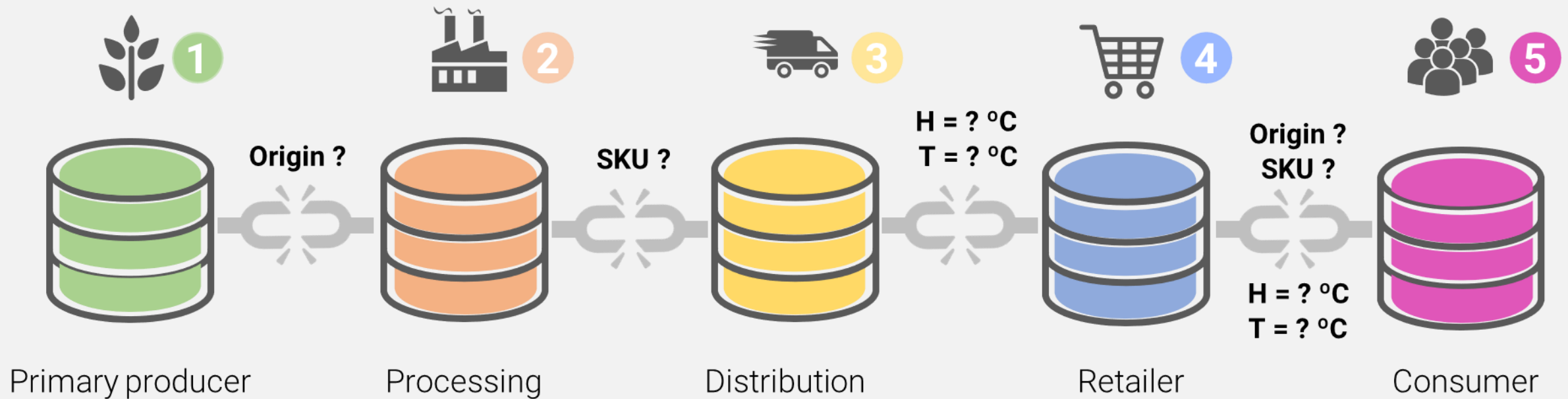


T=14.1 °C



SMART FOOD PACKAGING

The **food supply chain is highly fragmented**, i.e., food safety and traceability data cannot be linked from production up to consumption



TEAM



Tiago, PhD
CEO & μ Tech
PhD in Bioengineering
+5 yrs in sensors design



Ana, PhD
CTO & Signal
PhD in Neuroscience
+5 yrs in signal processing



Champalimaud
Foundation



Juan
Data Scientist



Cláudia
Front-end & UX



Bruno
Physics Engineer



MIT
Research
Partner



NOVA
Research
Partner

MILESTONES (2016 -)

5
countries



top-10
nanotech
SMEs



VISION

Smarten up any ~~substrate~~ package for extended use





We empower materials.
Everything can be smart!

QStamp® + Cort3x®

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Key message:

- 1 Food Safety & Traceability
- 2 Smart Packaging
- 3 Low-cost compliance

New opportunities
with our cost-range

Existing
Market
€ 12B
by 2020

food traceability¹

¹FinancesWire, 2018

VOCs
sensing
Photo
sensing
Enhanced
UX
Motion
sensing
Sound
interface

Untapped
Market

1 billion
packages/year
by 2020
(EUROPE)

Tiago Cunha Reis, PhD
Founder and CEO

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