From Blink to Think

Making Tech Accessible at Scale

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Today's **Agenda...**

01	Introducing Arduino
02	Arduino Reach and Amplification for Qualcomm **Super charge** Developer Ecosystem... from _Blink_ to _Think_
03	Arduino Product Portfolio
04	Deep Dive into Arduino Education
05	Next Steps and Actions

Our mission

Empowering anyone
to innovate by making complex
technologies simple to use

*Arduino is the largest open source, embedded
computing ecosystem in the world.
Incorporated in 2008*

*Arduino **designs**, **manufactures**, **distributes**
and **supports** its solutions worldwide*

33M+ Active Developers

Education
Revolutionize the
Learning Journey

Makers
Unleash People's
Creativity

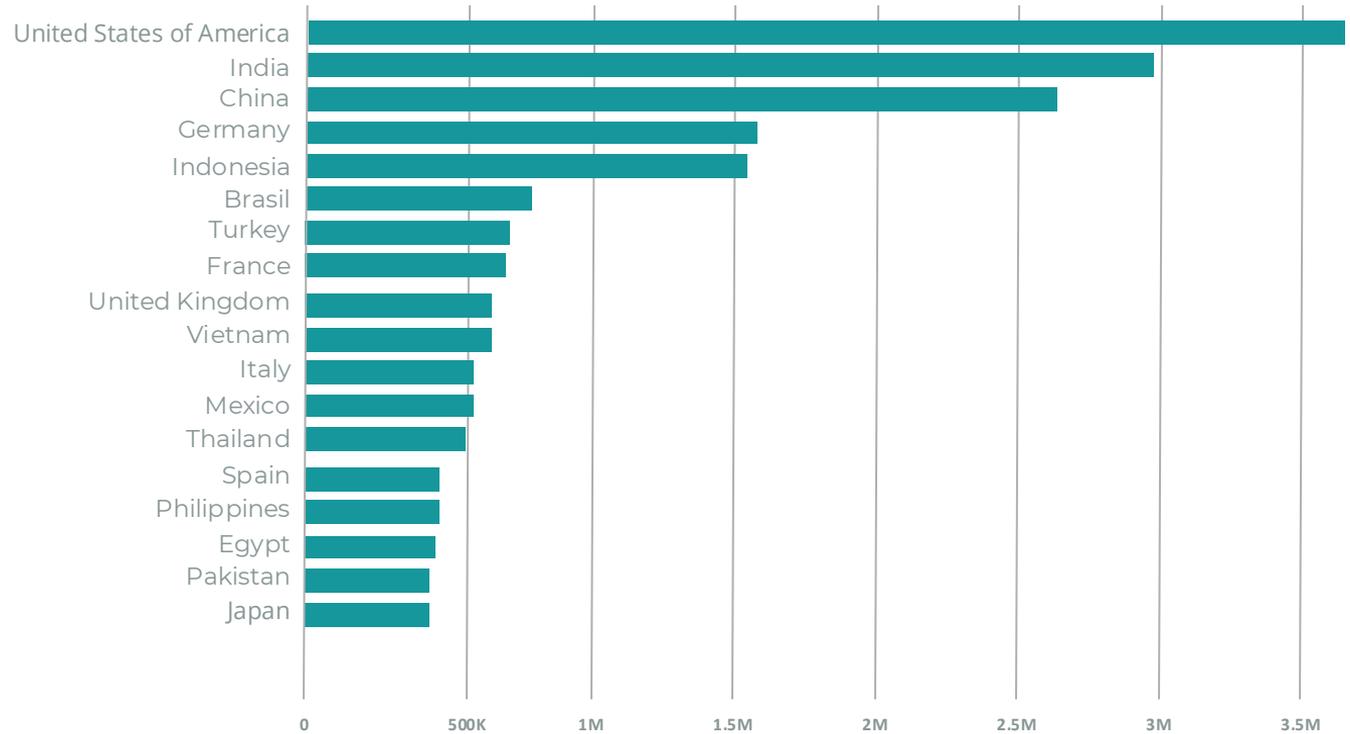**Professional**
Transform business with
open technology at the
edge

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36.7M Arduino IDE downloads (past 12 Months)

Thousands of applications

Country	Downloads
United States of America	
India	
China	
Germany	
Indonesia	
Brasil	
Turkey	
France	
United Kingdom	
Vietnam	
Italy	
Mexico	
Thailand	
Spain	
Philippines	
Egypt	
Pakistan	
Japan	

0   500K   1M   1.5M   2M   2.5M   3M   3.5M

A Platform Built on Simplicity, Community, and Scale

Easy-to-use **hardware and software to support anyone's creativity** and nurture a global community
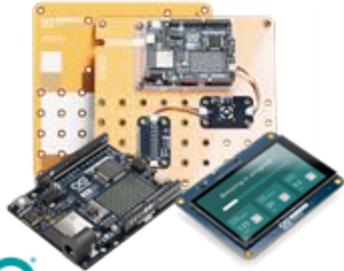
Kits and learning content to help students progress through STEAM from middle school to university

Solutions for prototyping, production and industrial automation, to support enterprises from prototyping to production

Cloud and on-prem **developer tools and IoT enablement** for schools, individuals, and enterprises.
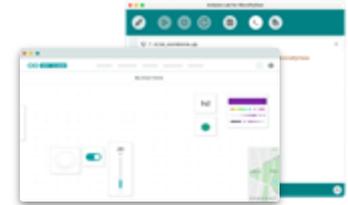
A **Platform** built on **Simplicity, Community,** and **Scale**

35M+ Active Developers
3.4M+ LinkedIn Users

1.5M+ Students
85K+ Schools, Universities

5K+ Companies
11K+ libraries available

140K+ Subscribers
6B+ Monthly **Messages**

Development Tools
Cloud & On-premise editors,
Code generators, Compliers,
Debuggers, AI Assistant,
Professional Libraries

Arduino Cloud
Device Management / OTA
(Embedded and Linux) , low
code Development Framework,
Device connectivity, data
management

AI Integrations
& Partnerships

EDGE IMPULSE
a Qualcomm company

Foundries.io   OpenMV

Knowledge
Community, Content,
Support, Open Source

30M+ Annual Page Views on
docs.arduino.cc; *forums.arduino.cc*
7.7M+ on Project Hub

Arduino is widely used in Fortune 500 Companies*

Industries   **Companies**

High Tech

aws · TATA · Google · Microsoft · amazon · Apple · Meta
Texas Instruments · BOSCH · RENESAS · TOSHIBA · arm · Qualcomm · NXP

Automotive 40%+

Ford · Mercedes-Benz · BMW · Buick · Audi · TESLA · Bentley
gm general motors · Toyota · Volkswagen · RENAULT · Ferrari

Industrial

Milwaukee · General Electric · GARMIN · Comau · CORNING · EATON · ThermoFisher SCIENTIFIC
Steelcase · BOEING · Coca-Cola · DENSO · Honeywell

Others

Shell · JABIL · Southwest · VANGUARD ROBOTICS · amcor · NASA
Shell · SPACEX · xerox · Lilly · Baxter · NavtechGPS
LOCKHEED MARTIN · stryker

that we are aware of

The world
Around us

Macro trends:

➔ **Edge AI**
➔ **Software Defined Everything**
(cars, factories, homes)
➔ **Democratization** of technology

Growing need for **secure edge platforms**.

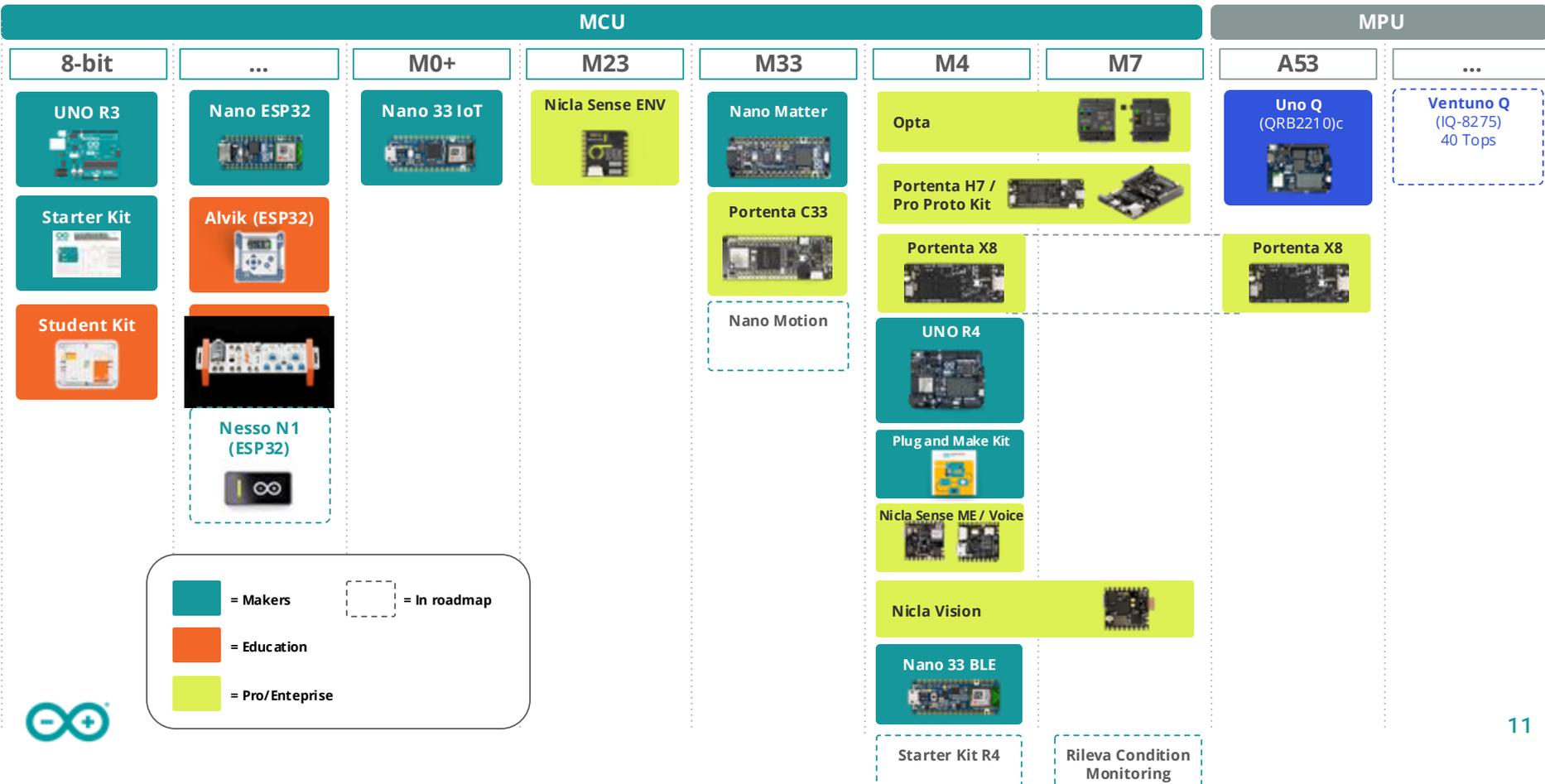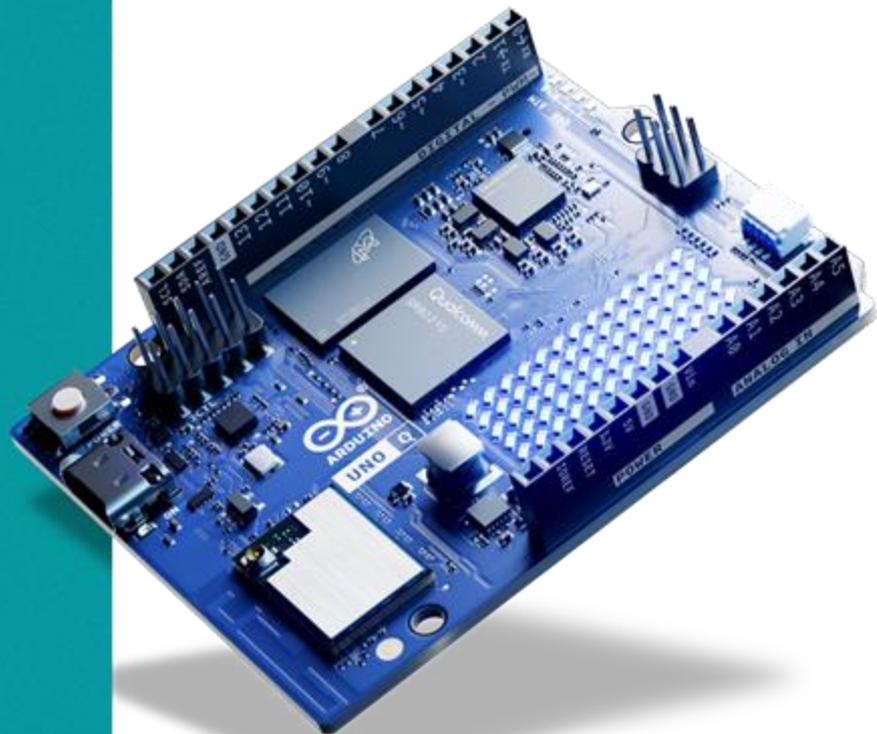Fostering curiosity to drive impact

"

The evolving developer

➔ Moving from
**hobbyist → pro maker →
industrial developer**.
➔ The new "**citizen developer**" in
IoT, automation, automotive.
➔ Arduino as a bridge: easy entry,
scalable to professional
deployment.

Product portfolio

MCU							MPU	
8-bit	**...**	**M0+**	**M23**	**M33**	**M4**	**M7**	**A53**	**...**

MCU — 8-bit:
- UNO R3 (Makers)
- Starter Kit (Education)
- Student Kit (Education)

MCU — ...:
- Nano ESP32 (Makers)
- Alvik (ESP32) (Education)
- Nesso N1 (ESP32) (In roadmap)

MCU — M0+:
- Nano 33 IoT (Makers)

MCU — M23:
- Nicla Sense ENV (Pro/Enterprise)

MCU — M33:
- Nano Matter (Makers)
- Portenta C33 (Makers)
- Nano Motion (In roadmap)

MCU — M4:
- Opta (Pro/Enterprise)
- Portenta H7 / Pro Proto Kit (Pro/Enterprise)
- Portenta X8 (Pro/Enterprise)
- UNO R4 (Makers)
- Plug and Make Kit (Pro/Enterprise)
- Nicla Sense ME / Voice (Pro/Enterprise)
- Nicla Vision (Pro/Enterprise)
- Nano 33 BLE (Makers)
- Starter Kit R4 (In roadmap)
- Rileva Condition Monitoring (In roadmap)

MPU — A53:
- Uno Q (QRB2210)c (Makers)
- Portenta X8 (Pro/Enterprise)

MPU — ...:
- Ventuno Q (IQ-8275) 40 Tops (In roadmap)

Legend:
- = Makers
- = Education
- = Pro/Enteprise
- = In roadmap

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A (re)volution **at the edge**

Democratize Electronics

Democratize Coding & Connectivity

Democratize IoT & AI

Arduino UNO® R3
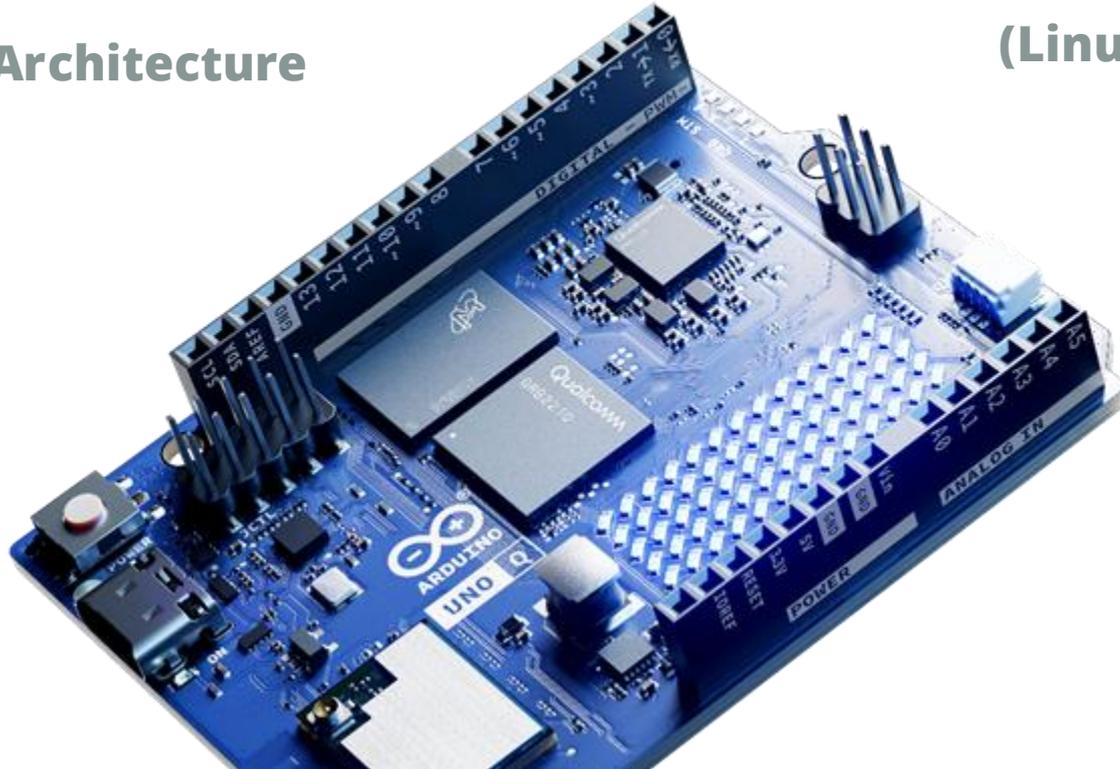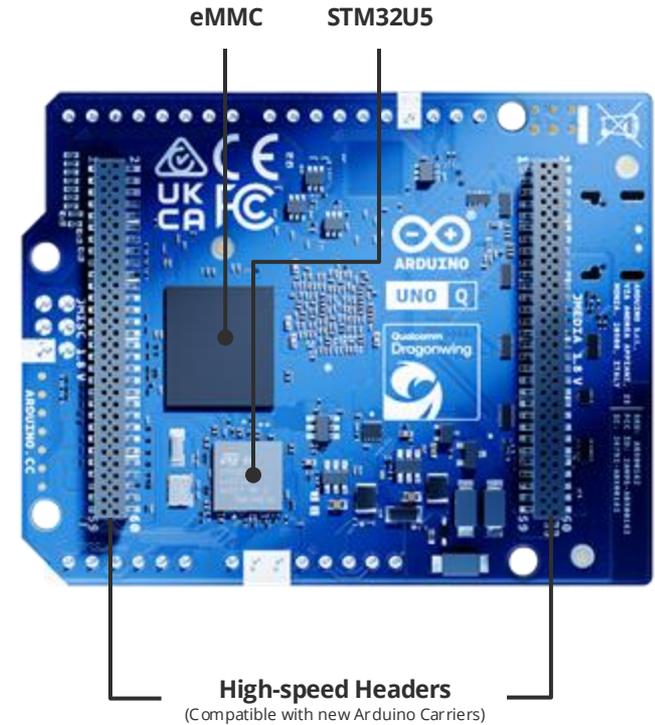
Arduino UNO® R4
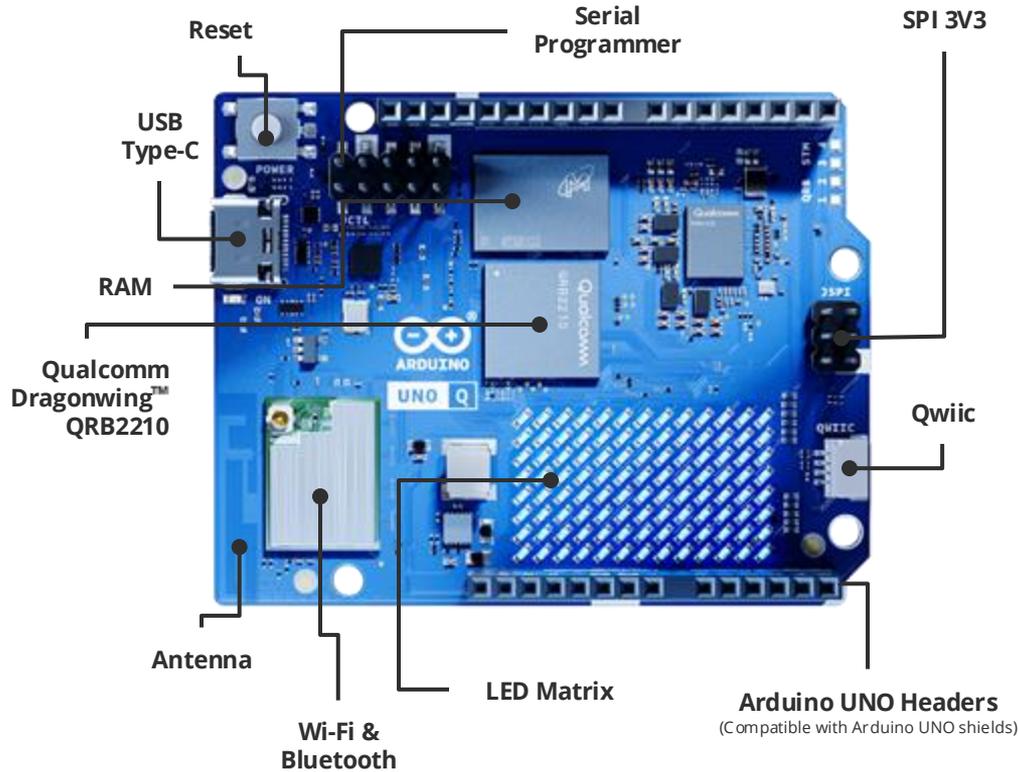
Arduino UNO® Q

The **most capable Arduino** ever

Dual-brain Architecture

(Linux+Arduino) App
Lab

Dual-brain architecture, built-in storage & connectivity

Reset

USB Type-C

RAM

Qualcomm Dragonwing™ QRB2210

Antenna

Wi-Fi & Bluetooth

LED Matrix

Serial Programmer

SPI 3V3

Qwiic

Arduino UNO Headers
(Compatible with Arduino UNO shields)

eMMC

STM32U5

High-speed Headers
(Compatible with new Arduino Carriers)

Connect Anything, easy

Arduino UNO Q supports Arduino UNO **Shields**, Arduino **Modulino™**, and the all-new Arduino UNO **Carriers**
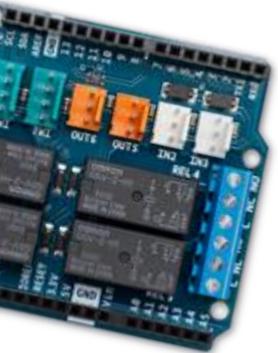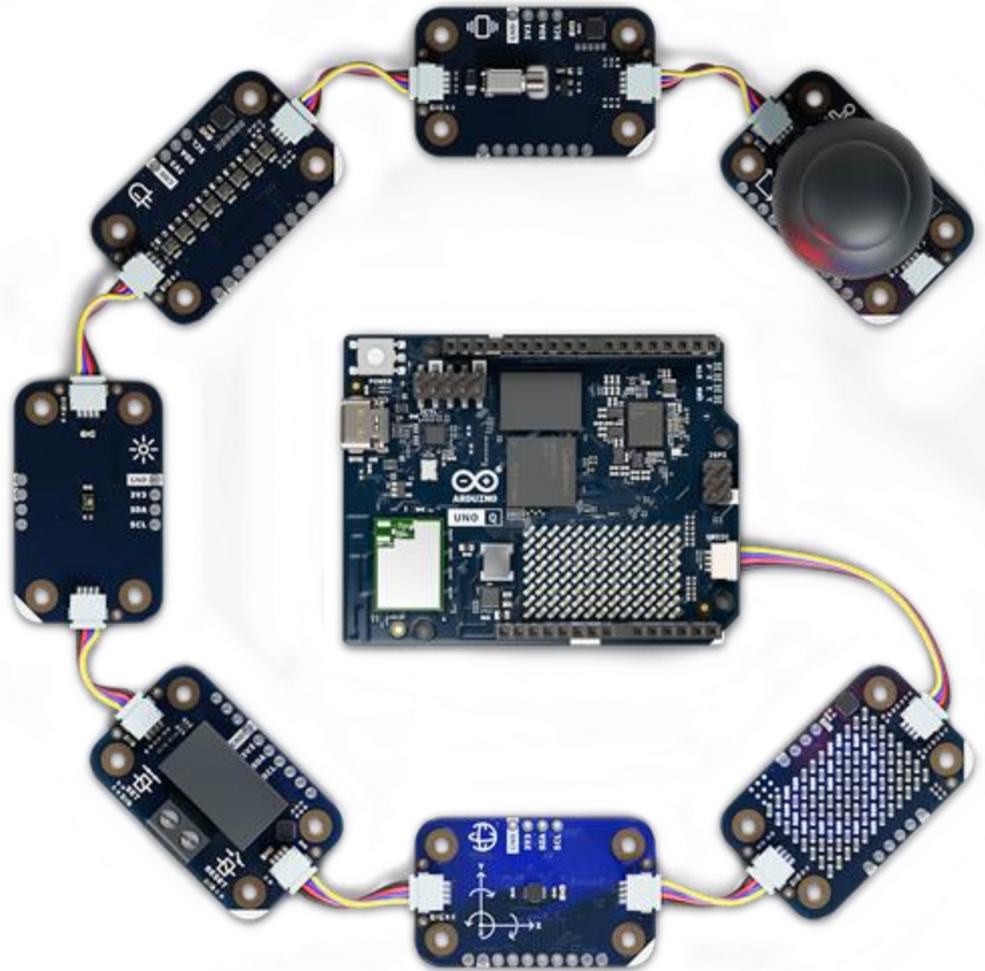
Two Setups
One Experience

PC-Connected Mode
Connect the UNO Q to your computer (via USB-C or via network mode) and run App Lab on your PC for a smooth and familiar development experience.

Standalone Mode
App Lab runs directly on UNO Q, just plug in a monitor, keyboard, and mouse for an all-in-one development environment. No PC needed.

(Linux+Arduino)^App Lab

UNO Q runs **Linux Debian** with upstream support, and **Arduino Core on Zephyr OS**.

Arduino App Lab is the converging point of development across MCU, CPU, and GPU platforms, uniting embedded (sketch) programming, Linux development, and edge AI
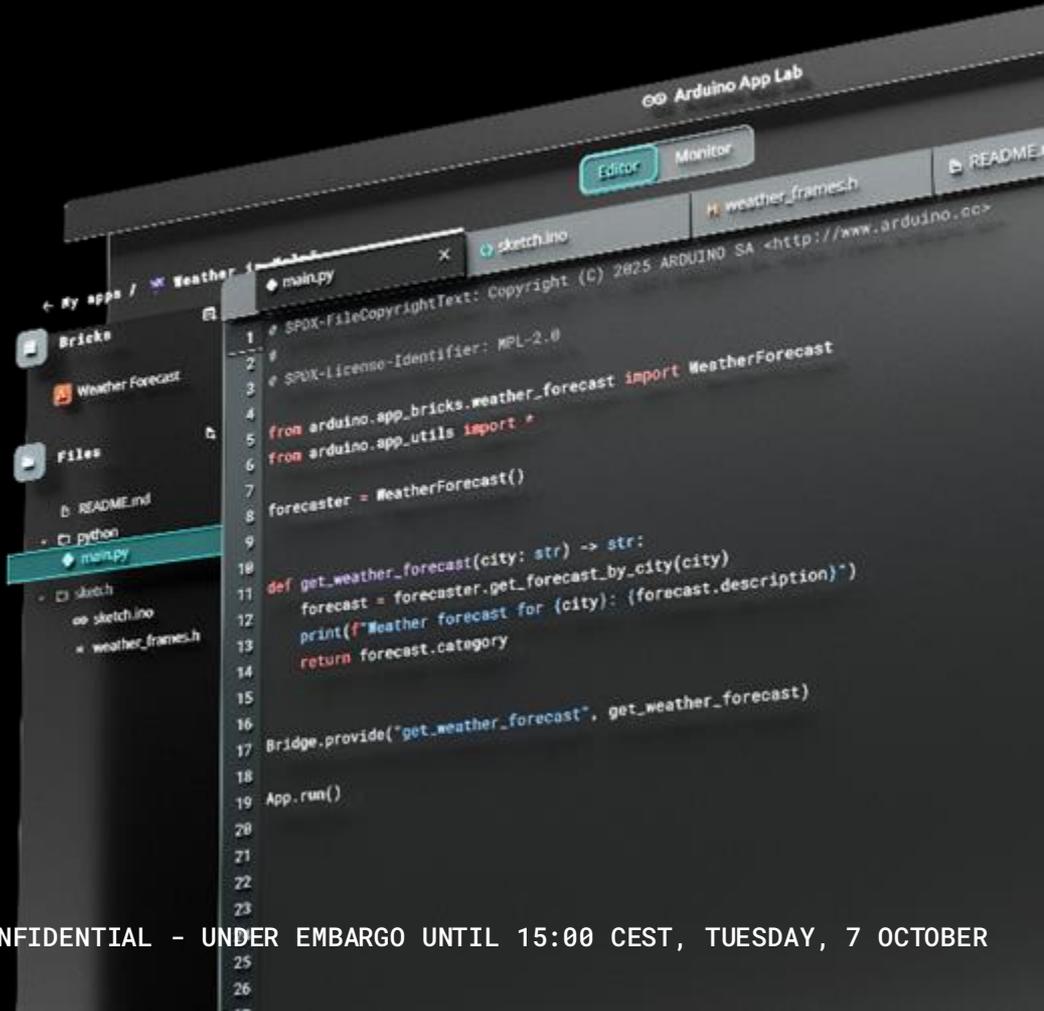
Meet the **next-generation developer experience**

Developers can start with dozens of **App Examples**, use **Bricks** and **Libraries** to create their own apps with **Arduino and Python,** and tap into powerful **AI models** to enable any use case **from Home Automation to Industrial Robotics**

Weather station on monitor

A weather forecast system that get the current weather and display it on LED matrix

Voice Mood Detection

Analyze voice input to determine mood or emotion

Blinking LED with UI

Blink an LED via microcontroller using RPC calls

Blinking LED with Arduino Cloud

Blink an LED from Arduino Cloud Dashboard or Mobile App

Classify images

It lets you perform image classification using a pre-trained neural network model. It features a web-based interface that allows you to upload images for classification,...

Color your LEDs

4 color pickers in UI to set the colors of the RGB LED matrix

Face Detection

Anomaly Detection

Person Classification

Image Classification

Keyword Spotting

Sound Recognition

Qualcomm Dragonwing™ QRB2210 + STM32U5 + WiFi+Bluetooth

2GB RAM/**16GB** eMMC

€39/$44

Order Today
Ships October 24th

4GB RAM/**32GB** eMMC

€53/$59

Order in November
(Ships by EOY)

AI Upskilling Certificate:
Hands-On Development from Model to App

Gain Practical AI Experience through Hands-On Learning

- ✓ Complete Projects with Real-World Applications.

- ✓ Gain Practical Skills in E2E AI Model Development.

- ✓ Construct AI Models Using **Edge Impulse**.

- ✓ Deploy Apps Using the **Arduino® UNO™ Q** Board.

- ✓ Program is Online, Self-Paced, and FREE.

- ✓ Earn a Qualcomm Technologies AI Certificate.