

NuDeveloper Ecosystem ●

Make engineers' jobs easier

David Chiu 邱達進

Joy of innovation
nuvoTon

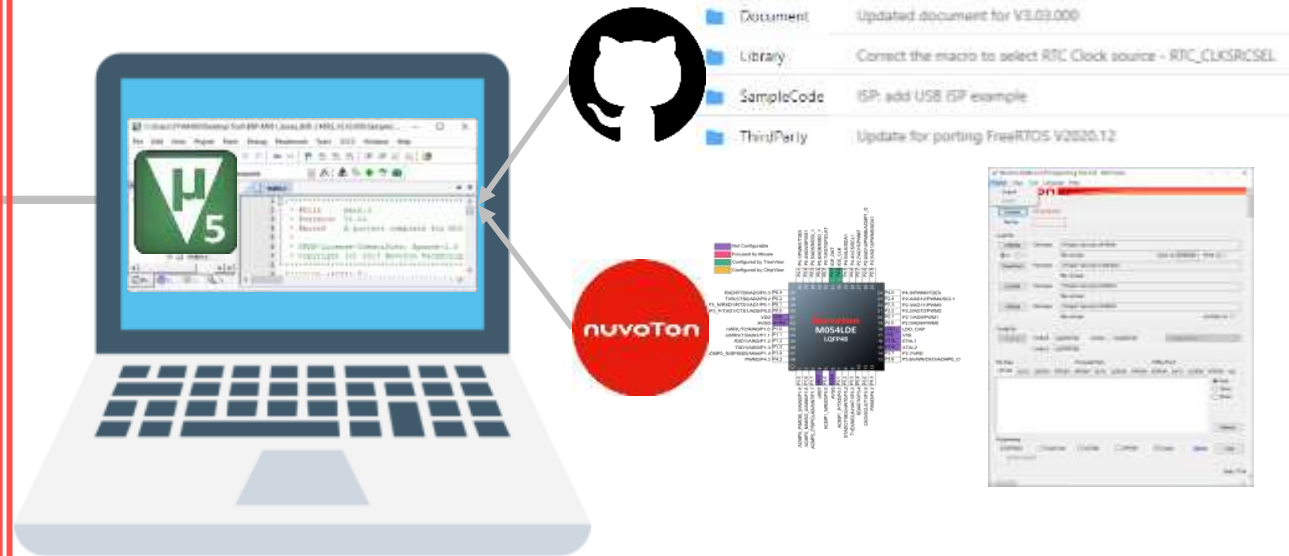


NuDeveloper Ecosystem Use Case

Hardware Tool



Software Tool



All in 1 to Make Job Easier


Hardware Tool

- General
- IoT
- HMI
- LCD Touch Key
- DALI
- Motor
- BMS
- ...

NuMaker
Evaluation Board

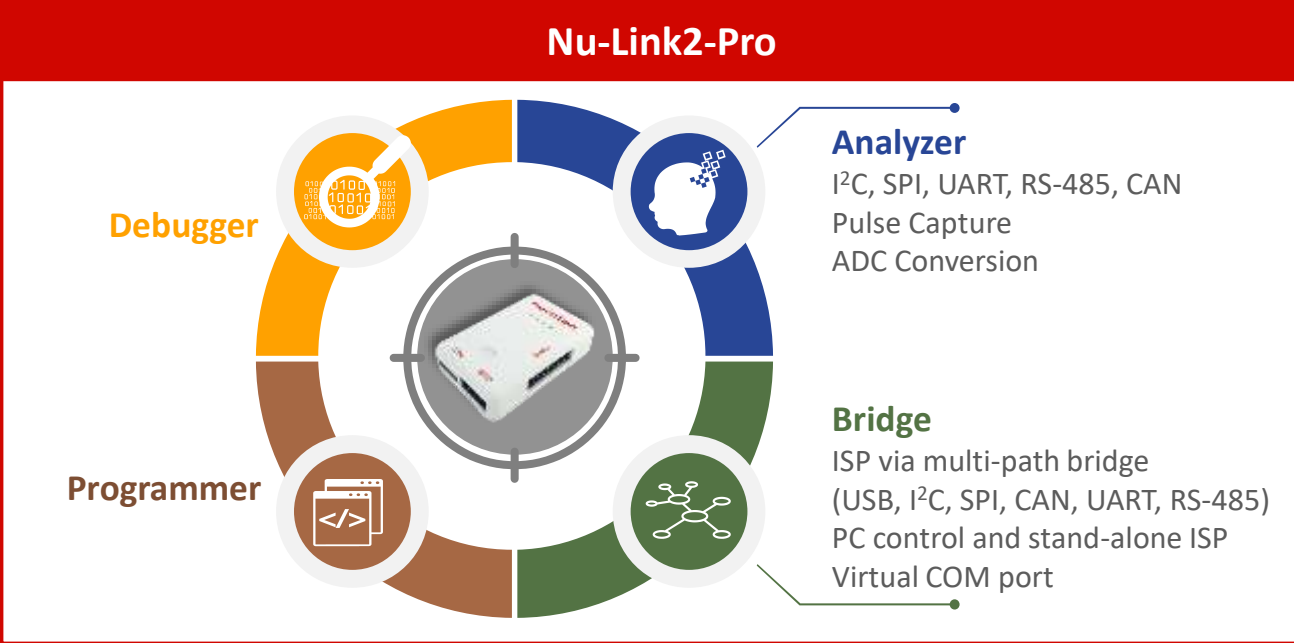
Nu-Link
Debugger & Programmer

Nu-Link2-Pro Nu-Link-Gang



Software Tool

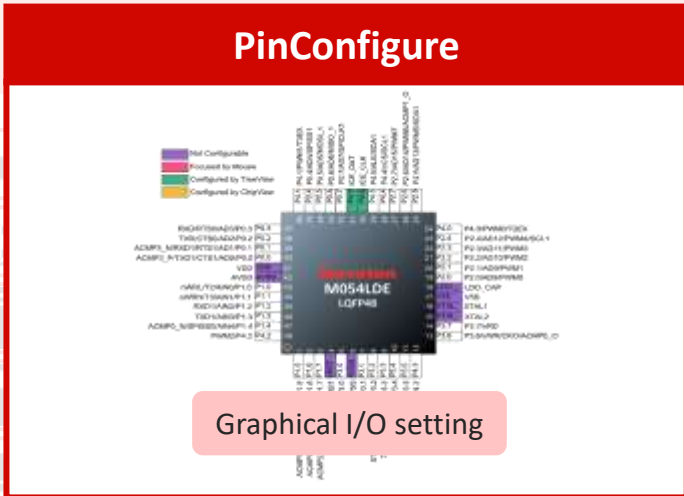
Nu-Link2-Pro



- Debugger**
- Analyzer**
I²C, SPI, UART, RS-485, CAN
Pulse Capture
ADC Conversion
- Programmer**
- Bridge**
ISP via multi-path bridge
(USB, I²C, SPI, CAN, UART, RS-485)
PC control and stand-alone ISP
Virtual COM port

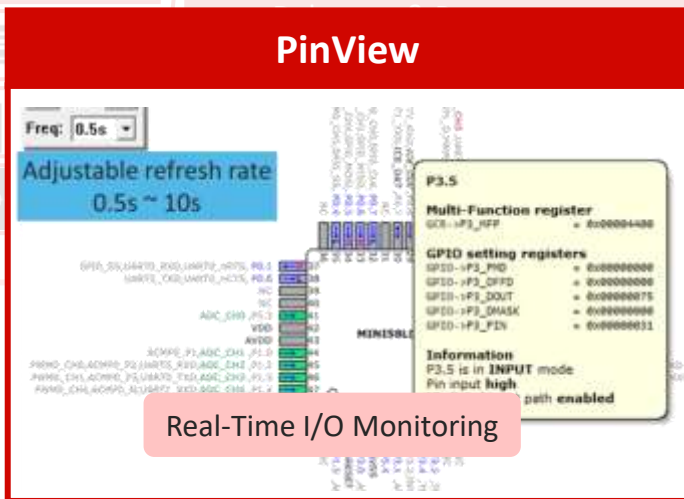
All in 1 to Make Job Easier

PinConfigure



Graphical I/O setting

PinView



Real-Time I/O Monitoring

Software Tool

IDE

BSP

Board Support Package

- Comprehensive drivers
- Plentiful peripheral examples
- API compatibility

NuTool

PinConfigure Tool

PinView Tool

LCDView Tool

ICP/ISP Programming Tool

Free-to-use for
NuMicro® M0/M23
Special offer for all
NuMicro® Series

Free-to-use for
NuMicro M0/M23/M4,
1T 8051

NuEclipse

All in 1 to Make Job Easier

Hardware Tool		Software Tool	
<ul style="list-style-type: none"> General IoT HMI LCD Touch Key DALI Motor BMS ... 	<p>NuMaker Evaluation Board</p>  <p>Nu-Link Debugger & Programmer</p>  <p>Nu-Link2-Pro Nu-Link-Gang</p>	<p>IDE</p>  <p>KEIL Tools by ARM IAR NuEclipse</p> <p>Free-to-use for NuMicro® M0/M23 Special offer for all NuMicro® Series</p>	<p>BSP</p> <p>Board Support Package</p> <ul style="list-style-type: none"> • Comprehensive drivers • Plentiful peripheral examples • API compatibility <p>NuTool</p> <p>PinConfigure Tool PinView Tool LCDView Tool ICP/ISP Programming Tool</p> 

Documentation		Technical Support & Communities					Reference Design Example Code			
Datasheet	Application Note	Online Course	Webinar	Online Chat	FAQ	Forum	GitHub	DALI	BMS	IIoT Gateway
TRM	...							HMI	Thermostat	...

All in 1 to Make Job Easier



The Way to Implement
3 Steps by
1 Platform

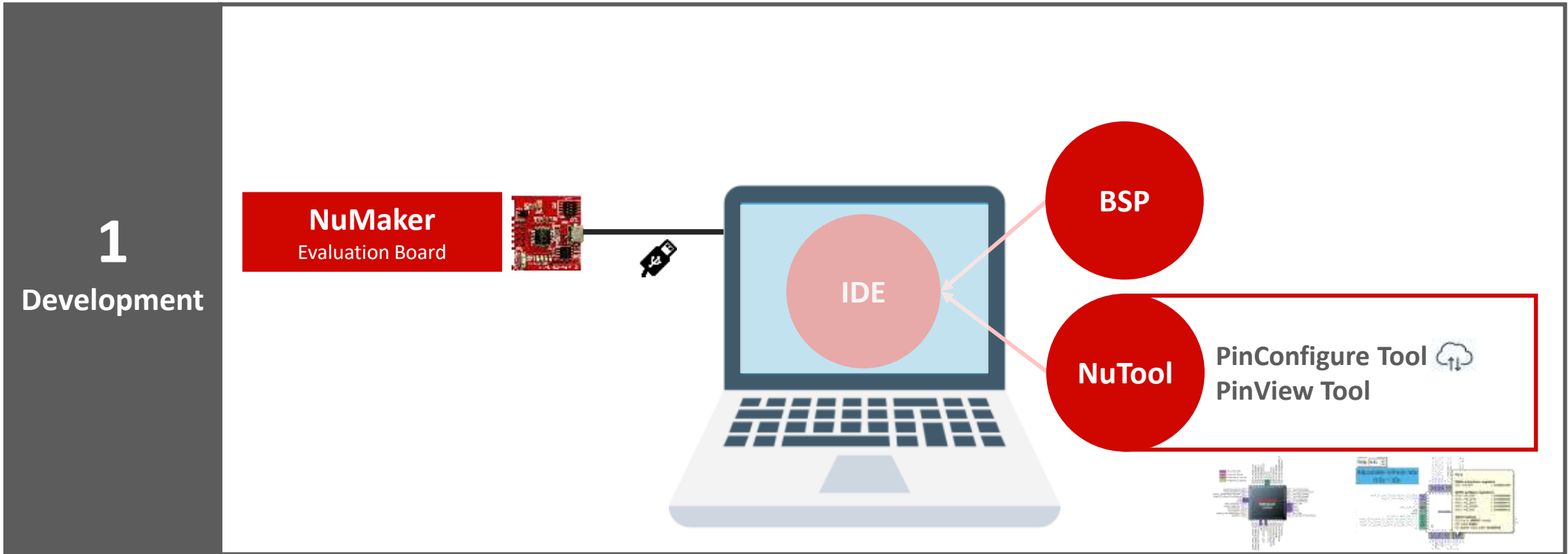
1
 Development




2
 Mass Production

3
 Upgrade

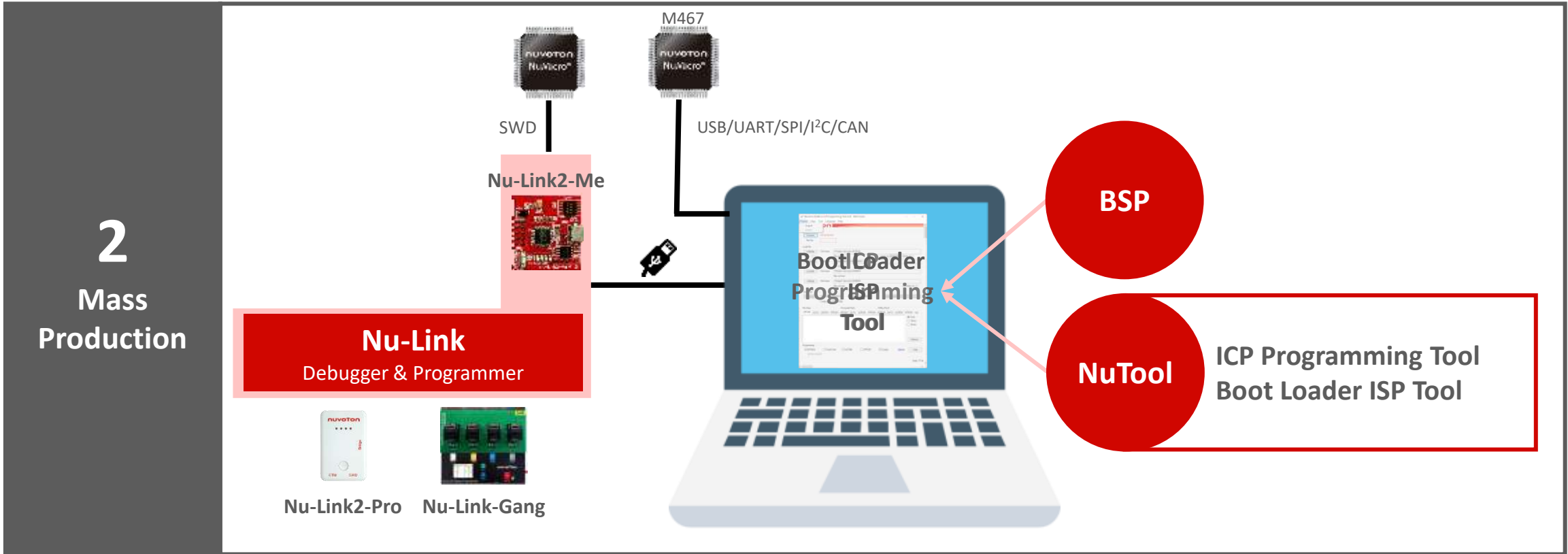
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TRM	...							HMI	Thermostat	...

All in 1 to Make Job Easier



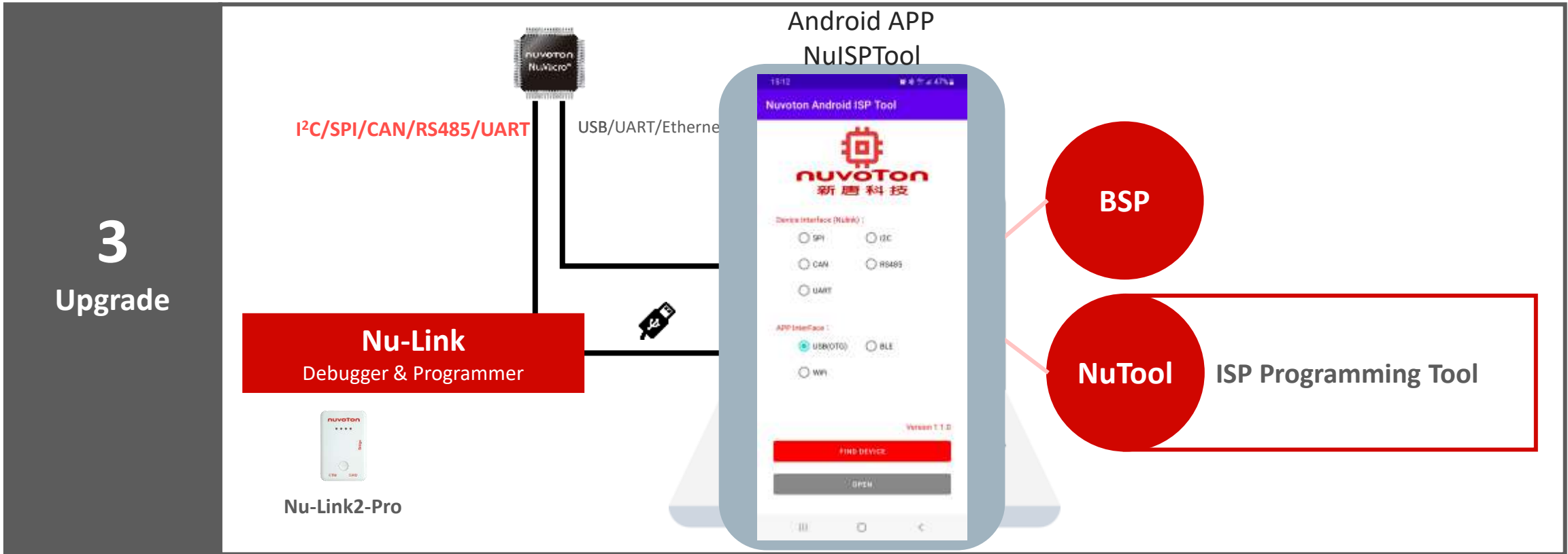
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TRM	...	Online Course	Webinar	Online Chat	FAQ	Forum	GitHub	HMI	Thermostat	...

All in 1 to Make Job Easier



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All in 1 to Make Job Easier



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All in 1 to Make Job Easier

Hardware Tool

General

IoT

HMI

LCD Touch Key

DALI

Motor

BMS

...

NuMaker

Evaluation Board

Nu-Link

Debugger & Programmer

Nu-Link2-Pro Nu-Link-Gang

Nu-Link2-Me

Software Tool

IDE

NuEclipse

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Special offer for all
NuMicro® Series

BSP

Board Support Package

- Comprehensive drivers
- Plentiful peripheral examples
- API compatibility

NuTool

PinConfigure Tool

PinView Tool

LCDView Tool

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NuDeveloper Ecosystem – Make engineers' jobs easier.

All in 1 to Make Job Easier

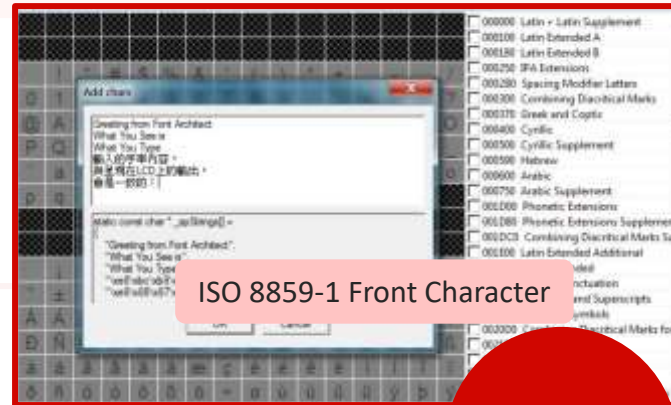
Up-to-Date Tools for Specific Applications

AppWizard



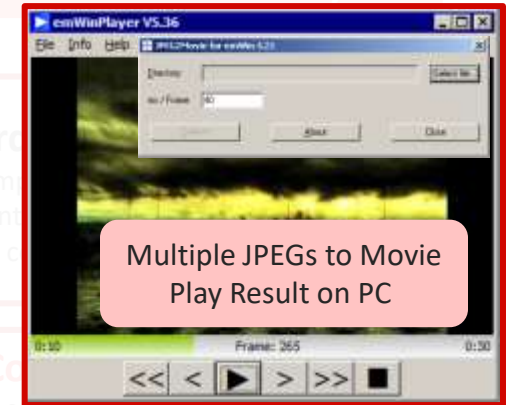
Widgets to Create GUI Easily

FontArchitect



ISO 8859-1 Front Character

JPEG2Movie emWinPlayer



Multiple JPEGs to Movie
Play Result on PC

NuTool

Ease Your Development & Save Your Time

General

IoT

HMI

LCD
Touch Key

DALI

Motor

BMS

...

Documentation

Datasheet

Application Note

TRM

NuMaker-HMI-M467

Online Course

Webinar

Online Chat

FAQ

Forum

GitHub

Reference Design
Example Code

DALI

BMS

IIoT Gateway

HMI

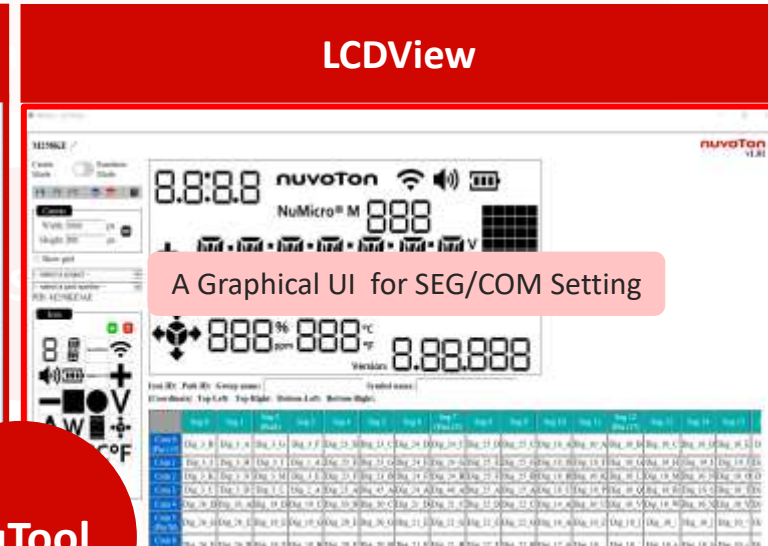
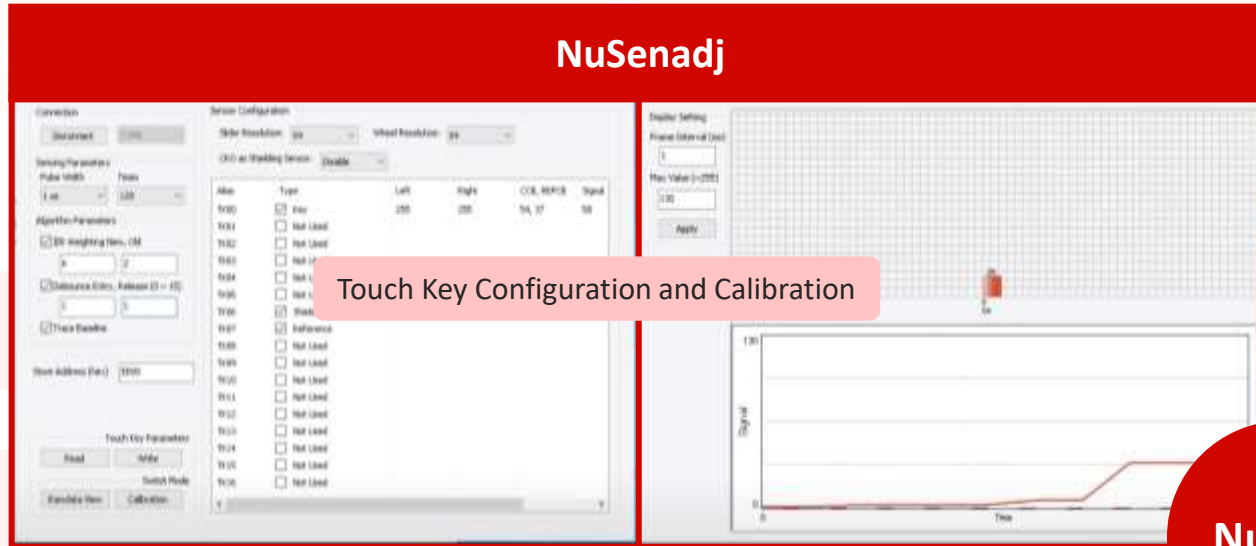
Thermostat

...

All in 1 to Make Job Easier

Up-to-Date Tools for Specific Applications

- General
- IoT
- HMI
- LCD Touch Key**
- DALI
- Motor
- BMS
- ...



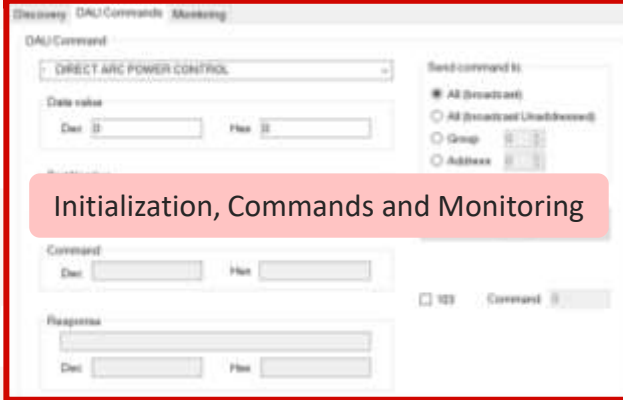
NuMaker-M258KE+TN-LCD Extension

Ease Your Development & Save Your Time

All in 1 to Make Job Easier

Up-to-Date Tools for Specific Applications

DALIController



NU-LINK

Debugger & Programmer

Software Tool

BSP

Board Support Package

- Comprehensive drivers
- Plentiful peripheral examples
- API compatibility

IDE

NuTool

PinConfigure Tool

PinView Tool

LCDView Tool

ICP/ISP Programming Tool

KEIL IAR NuEclipse

Ease Your Development & Save Your Time

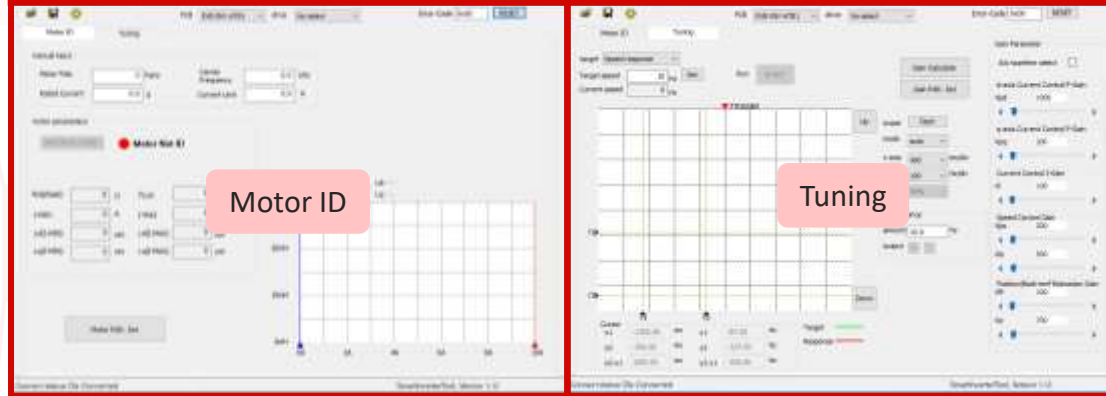


NuMaker-DALI-NDA102SD2+DALI Slave NDA102EC1

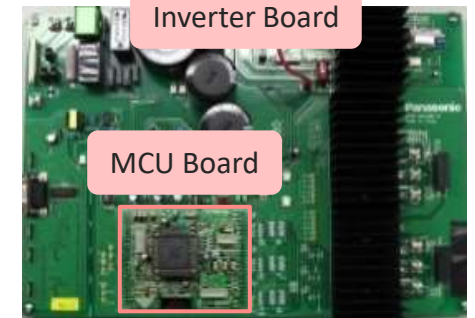
All in 1 to Make Job Easier

Up-to-Date Tools for Specific Applications

SmartInverter



Inverter Motor System



Software

BSP

NuTool

PinView Tool
LCDView Tool

*also supports AM32R core

Inverter Motor

HMI

LCD Touch Key

DALI

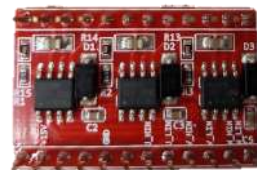
Motor

BMS

NuMotor



Nu-MDA-NMxxxx



Gate Driver



Nu-LVMDM-MOS

Ease Your Development & Save Your Time

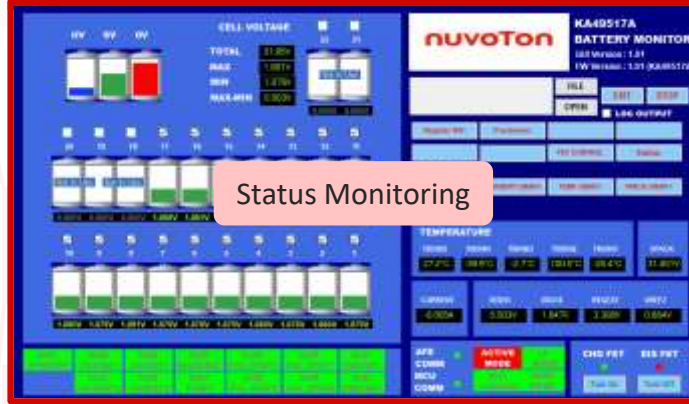


NK-1200L/1120L/1230L/1240L/1530L

All in 1 to Make Job Easier

Up-to-Date Tools for Specific Applications

BMS_KA49517/22A GUI Software



Status Monitoring

Debugger & Programmer

BMS Board
KA49517A/KA49522A

MCU Board
M483SE8AE

BM-IC System

Software Tool

BSP

Board Support Package

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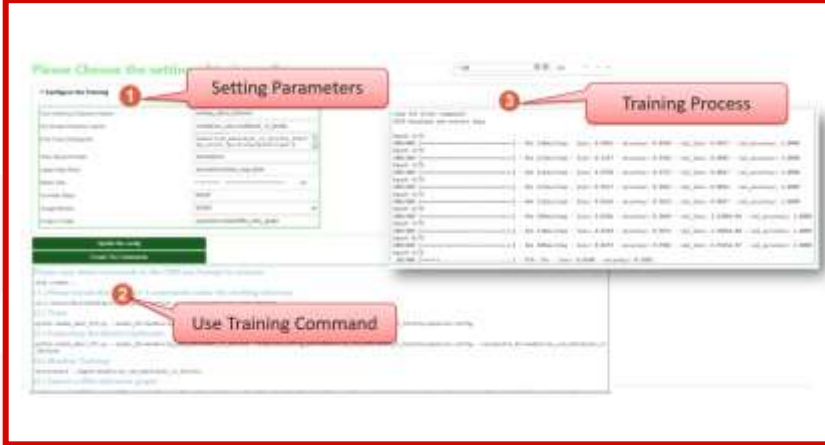
ICP/ISP Programming Tool

Ease Your Development & Save Your Time

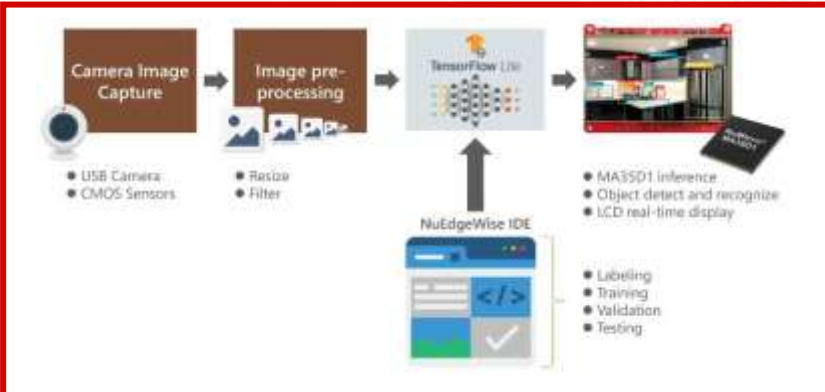
All in 1 to Make Job Easier

Up-to-Date Tools for Specific Applications

NuEdgeWise IDE



Model Deployment



Software Tool

BSP

Board Support Package

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NuTool

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PinView Tool

LCDView Tool

ICP/ISP Programming Tool

IDE

NUVOTON IAR NuEclipse

Ease Your Development & Save Your Time

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Hardware Tool

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Nu-Link2-Me

Nu-Link

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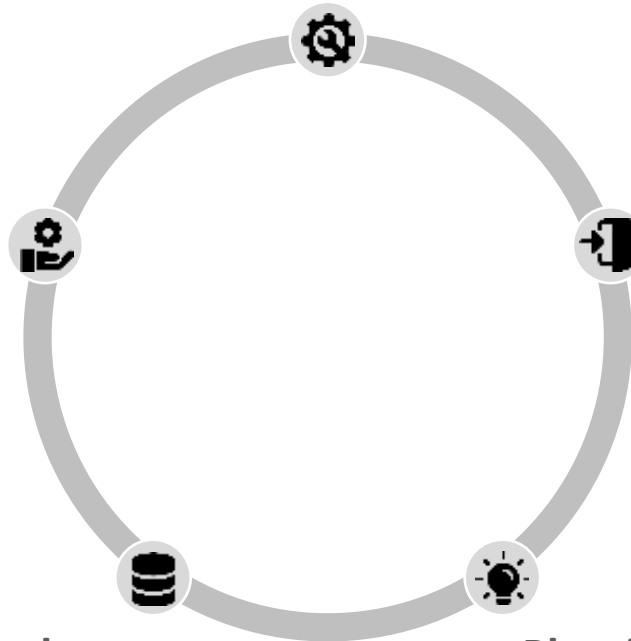
NuDeveloper Ecosystem – Make engineers' jobs easier.

NuDeveloper Ecosystem

Make Engineers' Jobs Easier

Hardware and Software Tool for General Use or Applications

Complete Tool Kits



Accessible Support

Get Tech Support/Training Easily

Solid Database

Resource for MCUs, MPUs, EVBs and Tools

Low Entry Barrier

1 USB Cable

Plentiful Example

Reference Design and Example Code for Applications

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