

Document information

Information	Content
Keywords	GoPoint, Linux demo, i.MX demos, MPU, ML, machine learning, multimedia, ELE, GoPoint for i.MX Applications Processors, i.MX Applications Processors
Abstract	This document explains how to run GoPoint for i.MX Applications Processors and details about the applications included in the launcher.



1 Introduction

GoPoint for i.MX Applications Processors is a user-friendly application that allows the user to launch preselected demonstrations included in the NXP provided Linux Board Support Package (BSP).

GoPoint for i.MX Applications Processors is for users who are interested in showcasing the various features and capabilities of NXP provided SoCs. The demos included in this application are meant to be easy to run for users of all skill levels, making complex use cases accessible to anyone. Users need some knowledge when setting up equipment on Evaluation Kits (EVKs), such as changing Device Tree Blob (DTB) files.

This user guide is intended for end users of GoPoint for i.MX Applications Processors. This document explains how to run GoPoint for i.MX Applications Processors and covers the applications included in the launcher.

2 Release information

GoPoint for i.MX Applications Processors is compatible with the i.MX family Linux BSP available at [IMXLINUX](https://imxlinux.com). GoPoint for i.MX Applications Processors and its included applications that are packaged alongside with it are included in binary demo files displayed on IMXLINUX.

Alternatively, users can include the GoPoint for i.MX Applications Processors and its applications, by including "packagegroup-imx-gopoint" in their Yocto images. This package is included in the "imx-full-image" package when the "fsl-imx-xwayland" distribution is selected on supported devices.

This document only covers information that is related to the Linux 6.12.3_1.0.0 release. For other releases, see the respective user guide for that release.

2.1 Supported devices

GoPoint for i.MX Applications Processors is supported on the devices listed in [Table 1](#).

Table 1. Supported devices

i.MX 7 family	i.MX 8 family	i.MX 9 family
i.MX 7ULP EVK	i.MX 8MQ EVK	i.MX 93 EVK
	i.MX 8MM EVK	i.MX 95 EVK
	i.MX 8MN EVK	
	i.MX 8QXPC0 MEK	
	i.MX 8QM MEK	
	i.MX 8MP EVK	
	i.MX 8ULP EVL	

For information about the i.MX-based FRDM development boards and ports, see <https://github.com/nxp-imx-support/meta-imx-frdm/blob/lf-6.6.36-2.1.0/README.md>.

2.2 GoPoint applications release package

[Table 2](#) and [Table 3](#) list packages included in the GoPoint for i.MX Applications Processors release package. The specific applications vary between releases.

Table 2. GoPoint framework

Name	Branch
nxp-demo-experience	lf-6.12.3_1.0.0
meta-nxp-demo-experience	styhead-6.12.3-1.0.0
nxp-demo-experience-assets	lf-6.12.3_1.0.0

Table 3. Application package dependencies

Name	Branch/Commit
nxp-demo-experience-demos-list	lf-6.12.3_1.0.0
imx-ebike-vit	6c5917c8afa70ed0ac832184f6b8e289cb740905
imx-ele-demo	2134feef0c7a89b02664c97b5083c6a47094b85
nxp-nnstreamer-examples	5d9a7a674e5269708f657e5f3bbec206fb512349
imx-smart-fitness	5ac9a93c6c651e97278dff0e2b979b3a6e16475
smart-kitchen	1f42aceae2e79f4b5c7cd29c169cc3ebd1fce78a
imx-video-to-texture	5d55728b5c562f12fa9ea513fc4be414640eb921
imx-voiceui	5eac64dc0f93c755941770c46d5e315aec523b3d
imx-voiceplayer	ab1304afa7fa4ec4f839bbe0b9c06dadb2a21d25
gtec-demo-framework	1f512be500cecb392b24a154e83f0e7cd4655f3e
imx-gpu-viv	Closed source

2.3 Applications provided by application packages

For documentation on each application, follow the link related to the application of interest.

Table 4. nxp-demo-experience-demos-list

Demo	Supported SoCs
ML Gateway	i.MX 8MM, i.MX 8MP, i.MX 93
Selfie Segmenter	i.MX 8MP, i.MX 93
ML Benchmark	i.MX 8MP, i.MX 93, i.MX 95
Face Recognition	i.MX 8MP
DMS	i.MX 8MP, i.MX 93
LP Baby Cry Detection	i.MX 93
LP KWS Detection	i.MX 93
Video Test	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 93
Camera using VPU	i.MX 8MP
2Way Video Streaming	i.MX 8MM, i.MX 8MP
Multi Cameras Preview	i.MX 8MP
ISP Control	i.MX 8MP

Table 4. nxp-demo-experience-demos-list...continued

Demo	Supported SoCs
Video Dump	i.MX 8MP
Audio Record	i.MX 7ULP
Audio Play	i.MX 7ULP
TSN 802.1Qbv	i.MX 8MM, i.MX 8MP

Table 5. imx-ebike-vit

Demo	Supported SoCs
E-Bike VIT	i.MX 8MM, i.MX 8MP, i.MX 93

Table 6. imx-ele-demo

Demo	Supported SoCs
EdgeLock Secure Enclave	i.MX 93

Table 7. nxp-nnstreamer-examples

Demo	Supported SoCs
Image Classification	i.MX 8MM, i.MX 8MP, i.MX 8QMMEK, i.MX 93, i.MX 95
Object Detection	i.MX 8MM, i.MX 8MP, i.MX 8QMMEK, i.MX 93, i.MX 95
Pose Estimation	i.MX 8MM, i.MX 8MP, i.MX 8QMMEK, i.MX 93, i.MX 95

Table 8. imx-smart-fitness

Demo	Supported SoCs
i.MX Smart Fitness	i.MX 8MP, i.MX 93

Table 9. smart-kitchen

Demo	Supported SoCs
Smart Kitchen	i.MX 8MM, i.MX 8MP, i.MX 93

Table 10. imx-video-to-texture

Demo	Supported SoCs
Video To Texture Demo	i.MX 8QMMEK, i.MX 95

Table 11. imx-voiceui

Demo	Supported SoCs
i.MX Voice Control	i.MX 8MM, i.MX 8MP

Table 12. imx-voiceplayer

Demo	Supported SoCs
i.MX Multimedia Player	i.MX 8MM, i.MX 8MP, i.MX 93

Table 13. gtec-demo-framework

Demo	Supported SoCs
Bloom	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 95
Blur	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
EightLayerBlend	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
FractalShader	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
LineBuilder101	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
Model Loader	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
S03_Transform	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
S04_Projection	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
S06_Texturing	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
Mapping	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95
Mapping Refraction	i.MX 7ULP, i.MX 8MQ, i.MX 8MM, i.MX 8MN, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP, i.MX 95

Table 14. imx-gpu-viv

Demo	Supported SoCs
Vivante Launcher	i.MX 7ULP, i.MX 8QXPC0MEK, i.MX 8QMMEK, i.MX 8MP, i.MX 8ULP
Cover Flow	i.MX 7ULP, i.MX 8ULP
Vivante Tutorial	i.MX 7ULP, i.MX 8ULP

2.4 Changes in this release

- Bumped recipes to pick the latest software release

2.5 Known issues and workarounds

- MIPI-CSI cameras no longer work by default. For more information on how to start, see "chapter 7.3.8" in *i.MX Linux User's Guide* (document [IMXLUG](#)).

3 Launching applications

Applications that are included in GoPoint for i.MX Applications Processors can be launched via various interfaces.

3.1 Graphical user interface

On boards where GoPoint for i.MX Applications Processors is available, an NXP logo is displayed on the top left-hand corner of the screen. Users can start the demo launcher by clicking this logo.

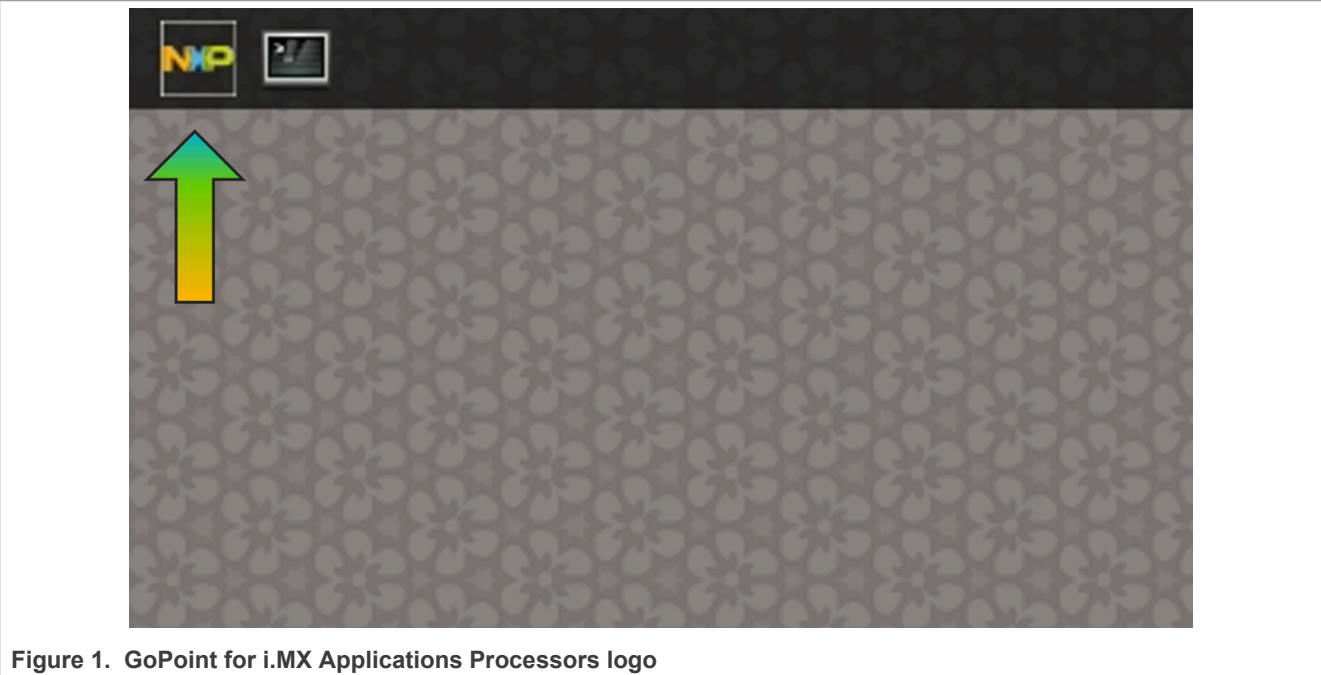


Figure 1. GoPoint for i.MX Applications Processors logo

After opening the program, users can launch demos using the following options shown in [Figure 2](#):

1. To filter the list, select the icon on the left to expand the filter menu. From this menu, users can select a category or subcategory that filters the demos displayed in the launcher.

2. A scrollable list of all the demos supported on that EVK appears in this area with any filters applied. Clicking a demo in the launcher brings up information about the demo.
3. This area displays the names, categories, and description of the demos.
4. Clicking **Launch Demo** launches the currently selected demo. A demo can then be force-quit by clicking the **Stop current demo** button in the launcher (appears once a demo is started).

Note: Only one demo can be launched at a time.

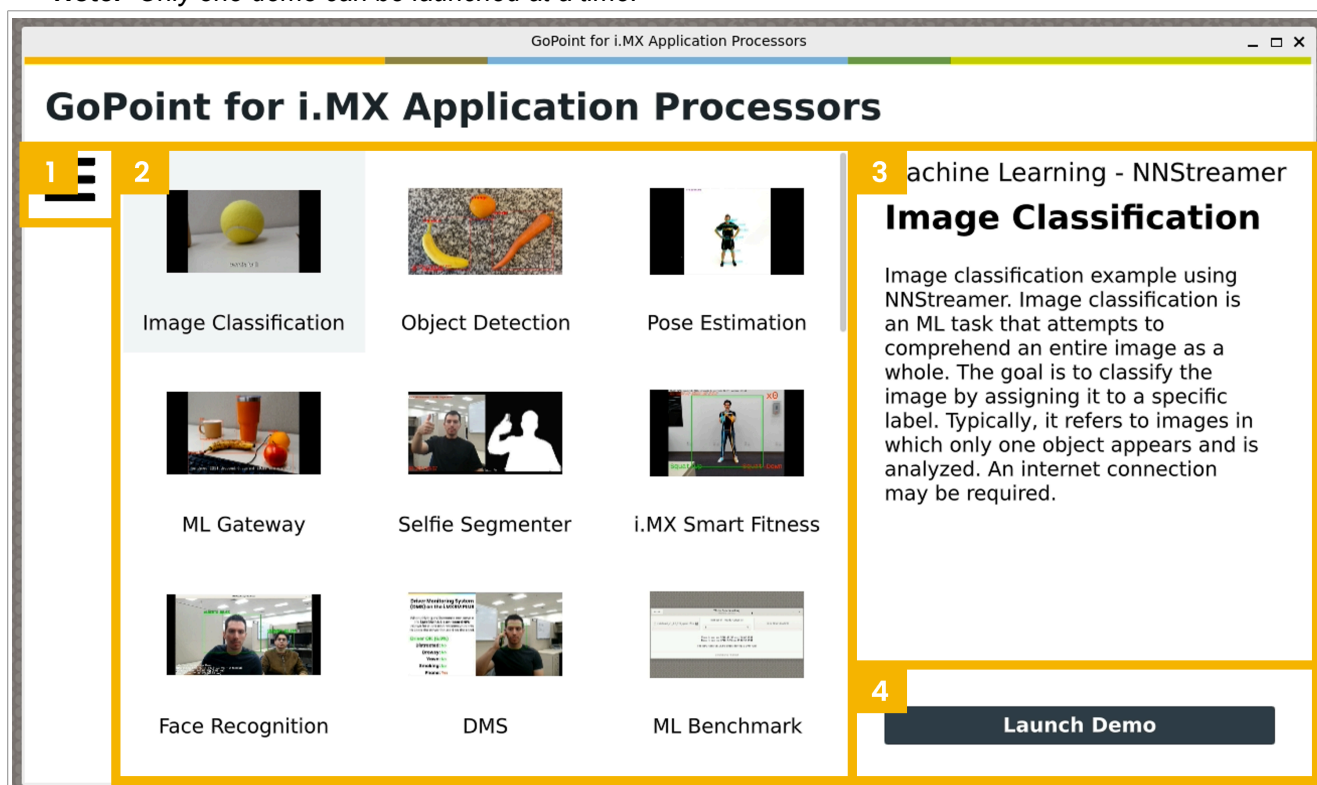


Figure 2. GoPoint for i.MX Applications Processors

3.2 Text user interface

Demos can also be launched from the command line through log-in into the board remotely or using the onboard serial debug console. Remember that most demos still require a display to run successfully.

Note: If prompted for a login, the default user name is "root" and no password is required.

To start the text user interface (TUI), type the following command into the command line:

```
# gopoint tui
```

The interface can be navigated using the following keyboard inputs:

- **Up and down arrow keys:** Select a demo from the list on the left
- **Enter key:** Runs the selected demo
- **Q key or Ctrl+C keys:** Quit the interface
- **H key:** Opens the help menu

Demos can be closed by closing the demo onscreen or pressing the "Ctrl" and "C" keys at the same time.

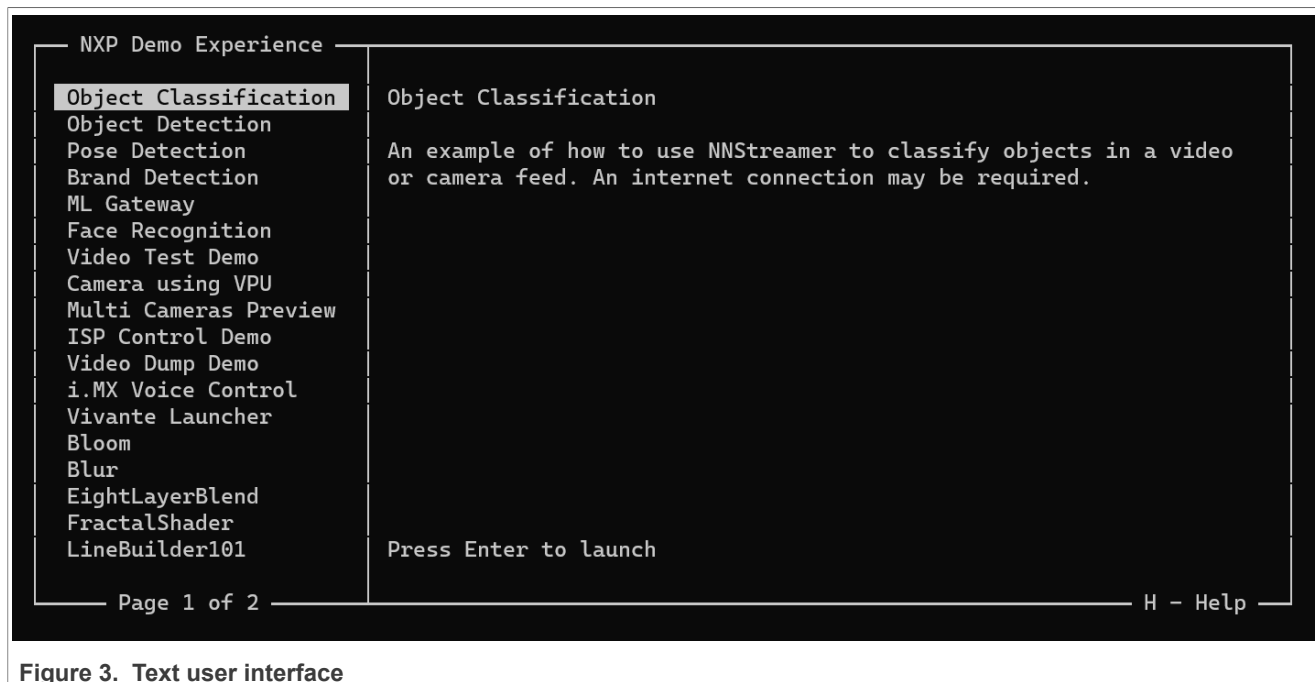


Figure 3. Text user interface

4 References

The references used to supplement this document are as follows:

- 8-microphone array board: [8MIC-RPI-MX8](#)
- Embedded Linux for i.MX Applications Processors: [IMXLINUX](#)
- *i.MX Yocto Project User Guide* (document [IMXLXYOCTOUG](#))
- *i.MX Linux User's Guide* (document [IMXLUG](#))
- *i.MX 8MIC-RPI-MX8 Board Quick Start Guide* (document [IMX-8MIC-QSG](#))
- *i.MX 8M Plus Gateway for Machine Learning Inference Acceleration* (document [AN13650](#))
- *TSN 802.1Qbv Demonstration using i.MX 8M Plus* (document [AN13995](#))

5 Note about the source code in the document

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6 Revision history

[Table 15](#) summarizes the revisions to this document.

Table 15. Revision history

Revision number	Release date	Description
GPNTUG v.11.0	11 April 2025	<ul style="list-style-type: none">Updated Section 1 "Introduction"Added Section 2 "Release information"Updated Section 3 "Launching applications"Updated Section 4 "References"
GPNTUG v.10.0	30 September 2024	<ul style="list-style-type: none">Added i.MX E-Bike VITUpdated References
GPNTUG v.9.0	8 July 2024	<ul style="list-style-type: none">Added Security
GPNTUG v.8.0	11 April 2024	<ul style="list-style-type: none">Updated NNStreamer demosUpdated Object classificationUpdated Object detectionRemoved section "Brand detection"Updated Machine learning gatewayUpdated Driver monitoring system demoUpdated Selfie segmenterAdded i.MX smart fitnessAdded Low-power machine learning demo
GPNTUG v.7.0	15 December 2023	<ul style="list-style-type: none">Updated for the 6.1.55_2.2.0 releaseRename from NXP Demo Experience to GoPoint for i.MX Applications ProcessorsAdded 2Way video streaming
GPNTUG v.6.0	30 October 2023	Updated for the 6.1.36_2.1.0 release
GPNTUG v.5.0	22 August 2023	Added i.MX multimedia player
GPNTUG v.4.0	28 June 2023	Added TSN 802.1 Qbv demo
GPNTUG v.3.0	07 December 2022	Updated for 5.15.71 release
GPNTUG v.2.0	16 September 2022	Updated for 5.15.52 release
GPNTUG v.1.0	24 June 2022	Initial release

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Contents

1 Introduction2

2 Release information2

2.1 Supported devices2

2.2 GoPoint applications release package2

2.3 Applications provided by application packages3

2.4 Changes in this release6

2.5 Known issues and workarounds6

3 Launching applications6

3.1 Graphical user interface6

3.2 Text user interface7

4 References8

5 Note about the source code in the document8

6 Revision history9

Legal information10

Please be aware that important notices concerning this document and the product(s) described herein, have been included in section 'Legal information'.