

## EVE Screen Designer 4.19.0 Release

### Features:

- WYSIWYG IDE.
- Logic node based Visual Programming method for screen logic creation.
- ANSI C Code generation for completed project.
- Live preview the designed project.
- Higher level widget and widget communication.
- Interactive widget.
- Extensible Widget Library.
- Tool Chain integration.
- Comprehensive example projects.
- .....

### Known Issues:

- Simulation engine may need restart manually in some case.
- Emulation process may crash in some case but will resume after that.
- C code editor is not a full-feature editor.
- Video and Sketch features of EVE are not supported through widget.
- If project file path is too long, it may have problem to open it.
- Logic node editor background may become white after windows hibernate.
- EVE Charge Point example has linking issue if path is very long and user will get a notification to change path.
- ESD can only play animation in Flash.

## History

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### Version 4.19.0

#### New features & enhancement

- Add the support of STM32 platform.
- Add the EVE flash memory feature into STM32 board.
- Create Dynamic Array Input.
- Add CoverFlow example project for STM32L4 platform.
- Add e-Bike example project.
- Release notes improvement.
- Improve widget functionality by enabling the selection of the corresponding radio button and checkbox widget through text-clicking.
- Add Scrolling Text Widget.
- Add options for Gauge Widget: OPT\_NOBACK, OPT\_NOTICKS, OPT\_NOPOINTER.
- Add Scrolling Text Widget.
- Clean redundant definition in project file.
- Improve example project "AdvancedWidgetsDemo".
- Add Image Slide Show Widget.
- Improve ESD Polygon Widget.
- Add QRCode to Basic example projects.
- Add options for the ESD Clock Widget to select between a background or no background.
- Improve widget functionality by enabling the selection of the corresponding radio button and checkbox widget through text-clicking.
- Move .esdm files to a separate folder in the project folder.

#### Resolved issues

- Fixed the issue that the ESD application crashes when adding an ESD Input and selecting the "esd\_fonticon\_t" type.
- Fixed the issue that Text Input on Property Browser cannot input "/" and "\" character.
- Fixed the issue that the ESD Page in the project browser is unable to rename.
- Fixed the issue that character set is empty in EVChargePoint example project.
- Fixed the issue that the .esdm file is assigned a size of 62 bytes, but the original .esdm file consistently remains at 56 bytes.
- Fixed the issue that the Font Icon search function is not recognizing case sensitivity.

## Version 4.18.0

### RC2

#### New features & enhancement

- Removed irrelevant source codes from the HAL of exported ESD project.
- Added the support of IDM2040-43A.
- Added a new widget ESD Textbox.
- Added a configuration select the QSPI(Quad) mode or single SPI mode.
- Replaced include file name "FT\_" with "Ft" and "<FT" with "<Ft" in all the source code.
- Double click to open example project.
- Added the IconTheme project into the Example project.
- Support Resource type PROGMEM option for image resources.
- Added the AssetBrowser project into the Example project.
- Improved the About window.
- Added Graph example project into Intermediate folder.
- Updated the version attribute to 41802 for all example projects.
- Hidden the irrelevant options are Memory Pool Limit and Pre-allocated .
- Memory Pool when Memory Pool Allocator is set to FALSE.

#### Resolved issues

- Resolved the issue with the Vertical Linear Roller Widget's inability to scroll.
- Fixed the issue with the lingering FontIcon dialog display after closing the app.
- Rectified the absence of text in certain logic editor nodes.
- Corrected the empty default character set property of the font.
- Resolved the error encountered when opening the bitmapPersistence example project in Windows Sandbox.
- Fixed the image conversion error with DXT1L2 and DXT1PALETTED formats.

## Version 4.17.0

### RC2

#### New features & enhancement

- Migrated ESD from Qt 5 to the latest version of Qt 6 (6.5).
- Upgraded the QScintilla module to version 2.14.1.
- Implemented digital signatures in all DLL files, EXE files, and the installation package file for enhanced security.
- Introduced the FontIcon widget in ESD.
- Added the gradient arc line widget in ESD.
- Integrated picotool for automatic device reset.
- Enabled zoom in/out functionality in the source editor.
- Enhanced the AnimatedLayout example project.
- Improved the template for creating new widgets.
- Library Browser now includes the ability to search through the descriptions as well.
- Added an additional LCD resolution option for a different aspect ratio of 1.792:1.
- Included font size and font family resource properties to the ESD number pad widget.
- Added one more menu item "Widget (in C only)".
- Added "Show in Explorer" option in the layout designer.
- Added "Show in Explorer" to the menu of folders in the project browser.
- Increased the default SPI Clock for the RPi2040 platform.

#### Resolved issues

- Resolved the text scaling issues on ESD when adjusting the text scaling (up to 250%) in Windows settings.
- Fixed the problem where the search function in the project browser couldn't find widgets that were part of an unopened page.
- Addressed the error that occurred when building the exported MSVC project using littlefs.
- Eliminated the issue causing crashes after clicking "undo"
- Corrected the default settings for the IDM2040 platform-based project, which were previously incorrect.
- Fixed the rendering issue with the Ring Widget.
- Made open files under FT\_Eve\_Hal selectable.
- The flash image is now correctly copied over to the exported project folder.

## Version 4.16.0

### RC1

#### New features & enhancement

- Added legacy font format support in ESD.
- Created a soft keyboard UI example.
- Created example project for LittleFS.
- Added new demo project change themes.
- Improved color picker example and widget.
- Added "Border Width" and "Border Color" for ESD Rectangle Widget.
- Supported file system for the assets added to Eve-flash.
- Enabled the alpha of bgcolor in ESD web outline button.
- Added the property of Widget Interface instance.
- Added highlight the connection lines in the logic node editor when they are selected in the project browser.
- Enabled the preview of the platform for the non-native ESD target.
- Updated animation in EVChargePoint.
- Generated the flash image in UF2 format when Pico platform is built.
- Enabled users to select a picture for new target platform.

#### Resolved issues

- Fixed the issue that change the first page name in project browser will cause error.
- Fixed the issue that Pico export file path issue.
- Fixed the issue that change the button from "Stop" to "Play".
- Fixed the issue that PNG file loading as PALETTED565 with "cmd\_loadimage" has the artifact.
- Fixed the issue that when rendering frame 32 in animation demo, bitmap handle 0 breaks.
- Fixed the issue that new target will directly overwrite the target with the same name.
- Fixed the issue that ESD build doesn't copy dlls to output folder automatically.
- Fixed the issue that makefile fails to rebuild sources when project precompiler definition changes.
- Fixed the issue that building errors when open "playVideo" example project.
- Fixed the issue that DXT1 gets padded to black.
- Fixed the issue that "switch bitmap cell" node under ESD utilities does not work as expected.

## Version 4.15

### 4.15.2

#### New features & enhancement

- Added additional feature for QR code widget.
- Added loop back mode in video example project.
- Improved optimize memory allocation by preferring static memory allocation.
- Added the memory pool module as an option to optimize memory management.
- Changed the cursor color in the C source file editor.

#### Resolved issues

- Fixed the issue that pages are missing from project browser after searching, open & close pages.
- Fixed the issue that ESD draws extra padding pixel for ASTC image.
- Fixed the issue that PushButton needs to cleanup its state if disabled while pushed.
- Fixed the issue that the character é is encoded differently in ESD C editor and notepad++.

### 4.15.1

#### Resolved issues

- Fixed the build error when import an animation name with space
- Port the animation display fix to official release

### 4.15.0

#### New features & enhancement

- User guide update.
- Updated default targets in several example projects to match the readme.
- Updated descriptions for all example projects.
- Improved view of Welcome Dialog description label, modified description for basic example projects.
- Modified build target names to match the real products.

- Improved new project descriptions, to make it more flexible and accurate, add LCD description.
- Improved widget icons, to make them match the usage of the widgets.
- Moved search bar in welcome dialog to upper level, to search 3 categories instead of only 1 before.
- Improved regular expression in config file to show correct host platform - platform match status.
- Improved slide style button to make the knob stay in far end if the button switch confirmed, and added reset signal.
- Removed network dependency for inno setup, to avoid the risk that no internet or server down during installation.
- Added additional option to turn on/off the touch pattern feature for number pad widget.
- Updated the mismatch build target for ME813 option from ME813AU-WH50C to ME813A-WH50C.
- Added feature to push button to emit signal continuously when depressed.
- Added Hidden Toolbar project example.
- Added IDM2040 support.
- Added Tab style paging project example.
- Added ME817EV and removed build target ME817EV-WH10C and ME817EV-WH70C.
- Added 'Welcome Screen' and grid display of example projects.
- Added Build target display in the 'New Project' dialogue.
- Added Login Pattern example project.
- Added Sliding Button widget.
- Added Joypad widget.
- Added Numberpad widget.
- Combine in PlayVideo example to play 2 videos in 2 different pages, one play at background, interruptible but without sound, the other one is not interruptible but can play sound. Removed PlayVideoMp4.

#### Resolved issues

- Fixed the issue that MPSSE platform build failure.
- Fixed the issue that build executable toolchain not filtered for VM816CU50A.
- Fixed the issue that alpha value in some widgets doesn't define the range.
- Fixed the issue that search bar in lib browser will show some result without any match.
- Fixed the issue that image of image button widget toggling.
- Fixed the issue that project crashed when previous opened project was deleted.
- Fixed the issue that recent project in welcome dialog can not match the projects opened if ESD doesn't restart.
- Fixed the issue that in login pattern demo, create multiple instances will impact each others.
- Fixed the issue that ESD Installer unable to run on virtual machine after adding CPU type detection feature.
- Fixed the issue that integrated options in toolchain combo box will not removed after pop up.
- Fixed the issue that FT4222 release config will show debug level log.
- Fixed the issue example project dialog choose the path only for develop, missing path check for release package.
- Fixed the issue of playing background video on Pico platform.

### Version 4.14.0

#### New features & enhancement

- User Guide and Widget documentation updated.
- Remove the .local file of example projects when creating release package.
- Improve the stability of signal switch example project.
- Improve manual control of Gradient widget.
- Install different astc encoder based on user's CPU type.
- Add Animation support which can play .anim file.
- Add optional library web style widgets, and 3 new widgets in it.
- Add new widget Text Box.
- Add new widget Ring Slider.
- Add new widget Spinner.
- Add style property for several widgets.
- Make alpha channel editable for theme color.
- Clean up the temp file when ESD exists.
- Add pico flash script.
- Removal of the feature which allows the User to add new Application Logic.

#### Resolved issues

- Fixed CPU type detection feature unable to run on virtual machine issue.
- Fixed sample projects which failed to build for x64/Ft9x/MPSSE.
- Fixed the image flash display issue when Chinese/Germany language is selected.

- Fixed the error of TextBox during input '\'.
- Fixed the display issue of align bottom for WebStyleTransparentButton, labelButton, FixedPointNumericLabel.
- Fixed the Range Slider Alpha value doesn't work issue.
- Fixed the default platform not proper issue for several example projects.
- Fixed issue Esd Color Picker Widget is missing.
- Fixed issue ESD Gradient start color/end color is not accurate.
- Fixed issue Paste widgets to different place in layout designer will overlap.

## Version 4.13

### **New features & enhancement**

- Added card detection pin.
- Updated environment check for FT90x and empty path check for environment.
- Single export key sequence for all different project types.
- Updated user manual with new section - Advanced User Settings and screenshots.
- Added Gameduino dazzler x3 platform support.
- Improved package installer script, it can automatically remove Build/Generated/Cache folder in Example project, and trigger inno build automatically.
- Added RST\_PULSE at boot up.
- Ported ILI9488 display to pico platform.
- Added Pico support.

### **Resolved issues**

- Fixed pico build issue.
- Added missing Data folder for pico export.
- Updated settings of all example projects such that mismatched setting does not occur in projects.
- Fixed issue ESD add unknown content in random files.

## Version 4.12

### **RC1**

#### **New features & enhancement**

- Introduce an example project to showcase scroll the pages with button instead of touch, and add rolling number widgets.
- Add video converter.
- Update the ASTCEnc to 2.X.
- Change the default image format.
- Introduce an example project to play mp4 video with video converter.

#### **Resolved issues**

- Fixed Search functionality in project browser works incorrectly.
- Fixed image conversion failure when the format is PNG and compress option is true.
- Fixed displaying image in paletted format has noise.
- Fixed The images are corrupt in EvChargePoint demo.

## Version 4.11

### **RC2**

#### **New features & enhancement**

- Introduce RAM\_G memory defragment improvement.
- Use GNU make to manage the compilation, will avoid recompile if there is no change of source code/object, compile time will be shorten by 20-30 seconds.
- Add one capacitive touch panel(CTP) configuration in tool bar.
- Add logic node for explicit type casting.
- Add installerMaker.bat script in order to improve the productivity of creating release package.

#### **Resolved issues**

- Fixed issue compact installation is same as custom installation.
- Fixed issue Wrong icon on touch selection.

- Fixed issue Refrigerator shall be in right resolution 320x480.
- Fixed issue Newly created page/widget is not created at expected location.
- Fixed issue Cut has the same behavior of copy.
- Fixed Example Advanced Widgets Demo issue(Roller widget).
- Implemented Handle the user case properly in which the maximum command-line length is 32767 characters.
- Fixed issue Newly created page/widget is not created at expected location.
- Fixed Abnormal behavior of example project HotelRoomConsole.
- Fixed issue BringUp/Down/SentTop/Back doesn't work properly.
- Fixed issue vertex\_format is not parsed correctly in inspector window.
- Fixed issue scroll switch page layout handles Y direction movement incorrectly.
- Updated Touch IC configuration to FOCAL for all example projects.

## Version 4.10.1

### New features & enhancement

- Improve performance by using compressed embedded data for the circular gradients.
- Add support for EVE GPU BT817/8 based platforms (ME817-WH10C, ME817-WH10C).
- Improve UI of New Target Dialog.
- Improve UI of New Target Dialog.
- Extend panning feature of Logic editor with Alt key and Left mouse press.
- Re-factor ESD Framework libraries.
- Add an example project for video player.
- Update user manual with new platform details.

### Resolved issues

- Fixed invalid flash image generation issue.
- Resolved the rendering issue of Gradient widget.
- Fixed the build problem for multiple actors in a project.
- Fixed the issue of widgets not drawing properly beyond 1024 coordinate.
- Blob updated for correct flash file generation.
- Fixed code generator for Actor files.
- Rectified build failure issue of exported Eclipse project.
- Rectified build failure issue of emulator based MSVC exported project.
- Fixed Build error when MM900X platform is selected.
- Fixed code generator for local method nodes.
- Fixed screen widget bounding box for auto switch layout.
- Fixed bugs in example projects.

## Version 4.9.4

### RC3

### New features & enhancement

- Add credits of installer scripts from han-soft.
- Add new Layout widget: ESD Auto Switch Widget.
- Update the EVE Emulator to version 4.0.1.
- Make installer more user friendly.
- Enable the option to install essential MSVC redistributable packages for ESD.
- Installer now supports only 64 bit Windows OS.
- Installer supports installation of essential MSVC redistributable packages for ESD.
- Bitmap converting tools now available as 64 bit application.
- Migrate to 64 bits windows application.
- Add new widget : ESD RSSI bar graph widget.
- Exporting of MSVC projects allowed only to empty folder.
- Touch Scroll actor improvement.
- Changing property of page/widget node process made more user friendly.
- Local method nodes unexpected deletion on pressing delete button is rectified.
- Internal library refactoring.
- User Manual and Widget documentation updated.
- Added new widget : ESD Range Slider interval.
- Added new feature of "Saving Project as" at a user desired different location.
- Added new simulation start and stop buttons.

- Added new feature to copy and paste actions from inspector window.
- Updated the Linear Roller widget behavior during zooming.
- Updated shortcut keys for menus and submenu.
- Updated ESD examples : ESD ActorAnimators.
- Enable users to define a logic node for a global variable under "User Globals" category of library browser by using built-in macro "ESD\_GLOBAL".
- Added new widget: ESD Range Slider.
- Added local Method node in logic flow.
- Introduced new caching mechanism to speed up simulation process.

#### **Resolved issues**

- Exported Eclipse project compilation issue resolved.
- Fixed bugs in example projects.
- Fixed crash issue resolved while adding new widgets.
- The rendering failure issues of linear roller widget.
- Crash issue while adding new widgets.
- Unexpected removal of Local method nodes on pressing delete button.
- Fixed code generator issue for Local methods.
- Fixed alpha property for some ESD Widgets not supported.
- Fixed explicit type casting issue in generated source code.

### **Version 4.8**

#### **RC2**

- Updated example project to support BT815 platform.
- Fixed issues of unfinished hanging connections lines in logic editor during mouse right click event.
- Comment node in logic node supports display of title.
- New dynamic switch layout which supports fade in/ fade out operation.
- Supports project recompilation on modification of source file automatically.
- File path max size imposed. User will be alerted in case if the file path exceeds MAX\_PATH.
- ESD Clock interactive property fixed.
- Temporary files generated from source generator in order to optimize the performance.
- Prevention mechanism introduced to avert the user from assigning a C keyword as project source file name.

### **Version 4.7**

#### **RC4**

- ASTC Image is displayed incorrectly when loading in Flash.
- Upgrade to Python3 for execution files in Tools folder.
- Updated the user and the widget documents.
- Comment node feature added to the Logic Node Edit.
- Comment node in Logic Node Editor generated as comments in the generated C code.
- Widget User Guide added to ESD.
- Simulation Window and Logic Node Editor windows orientation can be changed to vertical and horizontal.
- Lock icons introduced for the Framework, Widget library and Hal files.
- Image conversion utility improved.
- Code exporting for MSVC improved.
- Copy paste actions in Logic node creates more sensible names.

### **Version 4.6**

#### **RC4**

- Rectified the issue with the Push button widget.
- Update the coan to 32-bit application.
- ASTCEnc is in 64 bit.
- Fix the crash issue when creating new image or theme.
- Update the OTP in Eve emulator and blob for flash emulator.
- Add the support of VM816C/U with full features of BT81X, such as ASTC image, flash and unicode etc.
- Add more widgets: ESD Arc Slider, ESD Circular Slider, ESD Ring, ESD partial Ring.
- Restructured ESD project framework and its HAL library.
- Add BT816 specific example project: EV Charge Point under advanced category of example projects.

- Several UI enhancements:
  - Text searching box for library browser and project browser window.
  - More comprehensive toolbar buttons for platform selection.
  - New menu to clean up unused/generated files in ESD project.
  - Simplify the process of adding new resources into project.
  - Add context menu for document tab.

## Version 4.5

### RC2

#### New features & enhancement

- Update the user manual to latest version.
- Support VM816CC board with MPSSE or FT4222 boards.
- Update to latest EVE emulator for BT81X chip.
- Add circular gradient widget.

#### Resolved issues

- Fixed the issue showing compilation error when VM816CC target platforms were selected.
- Fixed runtime error while executing the exe in exported MSVC project from MPSSE platform.
- Fixed missing libmpsse.a and renamed libmpsse.a to libmpsse.lib.
- Fixed Issue #510, #510: Wrong building target is specified when compiling the project in some cases.
- Fixed Issue 507: VM816CC strings in ESD code needs to be updated with VM816C50A as per the new module name.
- Fixed Issue 505: Prompt user to install msvc 2010 redistributables when installing ESD.

## Version 4.2

- Add new toolchain support for ME813AU WH50C, which include build as PC executable as "X86 Release".
- Add new platform support for ME813AU WH50C, which also supports exporting ESD project as MS visual studio 2015 project.

## Version 4.1

### RC

- Update PanL35 New LCD driver.
- Disable platforms: PanL35, PanL70 and PanL70Plus.
- Add new platform support for PanL35, PanL70 and PanL70Plus.
- Add new widgets: touch panel, circle line, arc line, ring and partial ring.
- Add new layout: scroll switch panel layout.
- Add new actor: idle checker.

## Version 4.0

### RC2

- Fix the issue of displaying "Palette8" format bitmap.
- Update ScrollPanel and Basic Example projects.
- Add Alpha property to Circle and Panel Widgets.
- Update Image Button Widget.
- Add more tooltips for nodes in logic node editor.
- Fix some copy/paste issues.
- First draft user guide for 4.0.
- Fix the issue showing wrong compilation status while closing project.
- Fix "New Logic Source File" issue.
- Improve several widgets for ease of use.
- Fix several UI issues and copyright issues in generated source code.
- Improve example projects.
- Add project creation dialogue.
- Add layout feature and built-in project update utility.
- Add several more built-in logic nodes.
- Add several widgets: sketch, image rotate, scroll image etc.



- Support Palette8/DXT1/PNG/JPEG in image widget.
- Fix several common issues.
- Improve layout editor, logic editor for ease of use.
- Improve C editor.

## **Version 3.0**

### **RC3**

- Fix the bug of public variable setting issue.
- Fix the issue of wrong compilation status.
- Add building number and correct copyright information.

### **RC2**

- Support 3.5 module and fix memory leak issue in RC1.
- Build FatFs library from source code for FT90X 2.2.1 toolchain limitation.
- Video Tutorial for example project and improved user guide.

### **RC1**

- First internal release.