

## N9H20 emWin HMI Change Log

### Document Information

<b>Abstract</b>	Introduce N9H20 emWin HMI change log.
<b>Apply to</b>	N9H20 series

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# 1 Introduction

This document describes the files meaning in BSP/ThirdParty/emWin/Doc folder and Nuvoton N9H20 emWin HMI library change log.

Note: “Official” means this document comes from SEGGER emWin.

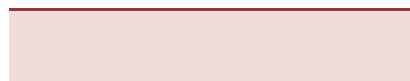
File Name	Description
Changelog.pdf	Nuvoton N9H20 emWin HMI Change log
UM_Font_Architect_EN_Rev1.03.pdf	Nuvoton emWin HMI font tool
UM_Font_Architect_TC_Rev1.03.pdf	Nuvoton emWin HMI font tool
AN03002_Custom_Widget_Type.pdf	Official application note
Release.html	Official change history
UM03001_emWin.pdf	Official user manual

## 2 N9H20 emWin HMI Change History

This chapter introduces N9H20 emWin HMI change log in the Nuvoton N9H20 BSP.

### 2.1 Change Log

N9H20 emWin HMI version	Description
<b>V6.10f.4</b>	<ul style="list-style-type: none"> <li>Supported bitmap font size greater than 255.</li> <li>Updated FontArchitect from v1.02 to v1.03 to generate bitmap font size greater than 255.</li> </ul>
<b>V6.10f.2</b>	<ul style="list-style-type: none"> <li>Nuvoton emWin HMI library comes from SEGGER emWin version V6.10f.</li> <li>Supported RGB565 or RGB888 rotation. (Source or destination)</li> </ul>
<b>V5.48k.8</b>	<ul style="list-style-type: none"> <li>Enabled "per-pixel alpha-blending" BitBlt feature to draw source format is ARGB8888 bitmap.</li> </ul>
<b>V5.48k.6</b>	<ul style="list-style-type: none"> <li>Added H/W BitBlt. (draw bitmap)</li> <li>GUI_DRAW_BMPM565 in 32-bit ARGB8888 frame buffer. (MSB is dummy byte)</li> <li>GUI_DRAW_BMPM8888I bitmap in 32-bit ARGB8888 frame buffer (MSB is dummy byte).</li> <li>GUI_DRAW_BMPM8888I bitmap in 16-bit RGB565 frame buffer.</li> </ul>
<b>V5.48k.4</b>	<ul style="list-style-type: none"> <li>Added GCC version library "libNUemWin_ARM9_GCC.a".</li> </ul>
<b>V5.48k.2</b>	<ul style="list-style-type: none"> <li>Nuvoton emWin HMI library comes from SEGGER emWin version V5.48k.</li> <li>Updated definition GUI_NUM_LAYERS from 1 to 4. (SoftLayer)</li> </ul>
<b>V5.46h.2</b>	<ul style="list-style-type: none"> <li>Initially created, Nuvoton emWin HMI library comes from SEGGER emWin version V5.46h.</li> <li>Updated definition GUI_USE_ARGB from 0 to 1.</li> <li>Updated touch from INT to POLL mode.</li> <li>Added H/W JPEG. (decoder)</li> <li>Added H/W BitBlt. (Rotation, Scaling and Translation)</li> <li>Added H/W BitBlt. (alpha blending)</li> </ul>



## Revision History

Date	Revision	Description
2020.03.31	1.00	1. Initially issued.
2020.10.30	1.01	1. emWin library updated from v6.10f.2 to v6.10f.4. 2. Windows tool FontArchitect updated from v1.02 to v1.03.

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