GigaDevice Semiconductor Inc.

GD32H779 与 GD32H75x 系列间的差异

应用笔记

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1. 介绍

本应用笔记主要介绍GD32H779与GD32H75x系列在引脚和外设资源方面的差异，后续章节将对这些差异进行详细说明。

注意：本应用手册仅作参考，若与用户手册或数据手册内容有冲突，以用户手册或数据手册为准。

2. 外设资源差异

GD32H779xx 与 GD32H757xx 系列芯片 LQFP100 封装下的资源差异，如*表 2-1. LQFP100 封装下 GD32H779xx 与 GD32H757xx 外设资源差异对照表*所示。

表 2-1. LQFP100 封装下 GD32H779xx 与 GD32H757xx 外设资源差异对照表

外设	GD32H779xx	GD32H757xx
FLASH(KB)	最高 9728	最高 3840
SRAM(KB)	最高 1152	最高 1024
General timer (16-bit)	7 (2,3,14-16,40-41)	10 (2-3,14-16,40-44)
SPI/I2S	6/4 (0-5)/(0-2,5)	5/4 (0-3,5)/(0-2,5)
USBHS	2	1
PKCAU	1	0
FFT	1	0
GPSI	1	0
SAI	4	2
CPDM	3	2
EDIM	1	0
RDCM	1	0
GPIO	80	78

GD32H779xx 与 GD32H757xx 系列芯片 BGA100 封装下的资源差异，如*表 2-2. BGA100 封装下 GD32H779xx 与 GD32H757xx 外设资源差异对照表*所示。

表 2-2. BGA100 封装下 GD32H779xx 与 GD32H757xx 外设资源差异对照表

外设	GD32H779xx	GD32H757xx
FLASH(KB)	最高 9728	最高 3840
SRAM(KB)	最高 1152	最高 1024
General timer (16-bit)	7 (2,3,14-16,40-41)	10 (2-3,14-16,40-44)
SPI/I2S	6/4 (0-5)/(0-2,5)	5/4 (0-3,5)/(0-2,5)
USBHS	2	1
PKCAU	1	0
FFT	1	0
GPSI	1	0
SAI	4	2
CPDM	3	2
EDIM	1	0
RDCM	1	0
GPIO	80	78

GD32H779xx 与 GD32H757xx 系列芯片 LQFP144 封装下的资源差异，如*表 2-3. LQFP144 封装下 GD32H779xx 与 GD32H757xx 外设资源差异对照表*所示。

表 2-3. LQFP144 封装下 GD32H779xx 与 GD32H757xx 外设资源差异对照表

外设	GD32H779xx	GD32H757xx
FLASH(KB)	最高 9728	最高 3840
SRAM(KB)	最高 1152	最高 1024
USBHS	2	1
ENET	2	1
PKCAU	1	0
FFT	1	0
GPSI	1	0
SAI	4	3
CPDM	4	2
EDIM	1	0
RDCM	1	0
GPIO	112	110

GD32H779xx 与 GD32H759xx 系列芯片 BGA176 封装下的资源差异，如*表 2-4. BGA176 封装下 GD32H779xx 与 GD32H759xx 外设资源差异对照表*所示。

表 2-4. BGA176 封装下 GD32H779xx 与 GD32H759xx 外设资源差异对照表

外设	GD32H779xx	GD32H759xx
FLASH(KB)	最高 9728	最高 3840
SRAM(KB)	最高 1152	最高 1024
PKCAU	1	0
FFT	1	0
GPSI	1	0
SAI	4	3
CPDM	4	2
EDIM	1	0
RDCM	1	0
GPIO	128	124

GD32H779xx 与 GD32H759xx 系列芯片 LQFP176 封装下的资源差异，如*表 2-5. LQFP176 封装下 GD32H779xx 与 GD32H759xx 外设资源差异对照表*所示。

表 2-5. LQFP176 封装下 GD32H779xx 与 GD32H759xx 外设资源差异对照表

外设	GD32H779xx	GD32H759xx
FLASH(KB)	最高 9728	最高 3840
SRAM(KB)	最高 1152	最高 1024
ENET	2	1
PKCAU	1	0
FFT	1	0
GPSI	1	0

外设	GD32H779xx	GD32H759xx
SAI	4	3
CPDM	4	2
EDIM	1	0
RDCM	1	0
GPIO	120	115

3. 引脚差异

以下表格列出了不同封装形式下，GD32H779xx 与 GD32H759/757xx 系列芯片的引脚差异，如*表 3-1. 不同封装下 GD32H779xx 与 GD32H759/757xx 引脚差异性对照表*所示。

表 3-1. 不同封装下 GD32H779xx 与 GD32H759/757xx 引脚差异性对照表

封装类型	引脚号	GD32H779xx 引脚名称	GD32H759/757xx 引脚名称
LQFP176	82	PH6	VDDLDO
	87	PB14	USBHS1_DM
	88	PB15	USBHS1_DP
	130	PA11	USBHS0_DM
	131	PA12	USBHS0_DP
	135	NC	VDDLDO
	175	NC	VDDLDO
BGA176	A3	NC	VDDLDO
	A13	NC	VDDLDO
	B15	PA12	USBHS0_DP
	C15	PA11	USBHS0_DM
	K14	PB15	USBHS1_DP
	K15	PB14	USBHS1_DM
	R14	NC	VDDLDO
LQFP144	103	PA11	USBHS0_DM
	104	PA12	USBHS0_DP
LQFP100	70	PA11	USBHS0_DM
	71	PA12	USBHS0_DP
BGA100	B10	PA12	USBHS0_DP
	C10	PA11	USBHS0_DM

4. 版本历史

表 4-1. 版本历史

版本号.	说明	日期
1.0	首次发布	2026 年 11 月 9 日

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