

C ADVANCED PRODUCT FEATURES

Overview

This appendix provides a summary of advanced features that are included in the ADSP-218x family processors. [Table C-1](#) lists each processor and identifies the features each contains. (For basic features, see [Table 1-1](#) in [Chapter 1, “Introduction.”](#))

Table C-1. ADSP_218x Processor Advanced Features

Processor	BDMA Mode Switching	$\overline{\text{BMS}}$ Disable	IDMA/BDMA Overlay Support RAM	IDMA Short Read Only Mode	Enhanced Wait States (2N+1, BMWAIT)	Mode D $\overline{\text{IACK}}$ Wired-OR
ADSP-2181	No	No	No	No	No	N/A
ADSP-2183	No	No	No	No	No	N/A
ADSP-2184	Yes	Yes	No	No	No	No
ADSP-2184L ¹	Yes	Yes	No	No	No	No
ADSP-2184N ³	Yes	Yes	No	Yes	Yes	Yes
ADSP-2185	Yes	No	No	No	No	No
ADSP-2185L ¹	Yes	Yes	No	No	No	No
ADSP-2185M ²	Yes	Yes	No	Yes	Yes	Yes

Overview

Table C-1. ADSP_218x Processor Advanced Features (Cont'd)

Processor	BDMA Mode Switching	$\overline{\text{BMS}}$ Disable	IDMA/BDMA Overlay Support RAM	IDMA Short Read Only Mode	Enhanced Wait States (2N+1, BMWAIT)	Mode D $\overline{\text{IACK}}$ Wired-OR
ADSP-2185N ³	Yes	Yes	No	Yes	Yes	Yes
ADSP-2186	Yes	Yes	No	No	No	No
ADSP-2186L ¹	Yes	Yes	No	No	No	No
ADSP-2186M ²	Yes	Yes	No	Yes	Yes	Yes
ADSP-2186N ³	Yes	Yes	No	Yes	Yes	Yes
ADSP-2187L ¹	Yes	Yes	Yes	No	No	Yes
ADSP-2187N ³	Yes	Yes	Yes	Yes	Yes	Yes
ADSP-2188M ²	Yes	Yes	Yes	Yes	Yes	Yes
ADSP-2188N ³	Yes	Yes	Yes	Yes	Yes	Yes
ADSP-2189M ²	Yes	Yes	Yes	Yes	Yes	Yes
ADSP-2189N ³	Yes	Yes	Yes	Yes	Yes	Yes

- 1 L indicates that the processor operates at 3.3 V. These processors are not tolerant to 5 V inputs.
- 2 M indicates that the processor core operates at 2.5 V and that the external I/O can operate at 2.5 V or 3.3 V. The external I/O is tolerant to up to 3.6 V inputs with a supply voltage of 2.5 V or 3.3 V. However, it is not tolerant to 5 V inputs.
- 3 N indicates that the processor core operates at 1.8 V and that the external I/O can operate at 1.8 V or 3.3 V. The external I/O is tolerant to up to 3.6 V inputs with a supply voltage of 1.8 V or 3.3 V. However, it is not tolerant to 5 V inputs.