# 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 |

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.