

## Section 27. dsPIC30F SMPS Devices

### 27.1 INTRODUCTION

Part II of the dsPIC30F Family Reference Manual provides information on modules specific to the dsPIC30F Switch Mode Power Supply (SMPS) digital signal controllers. The dsPIC30F SMPS family of devices includes peripherals that are ideally suited for power control applications. These peripherals include a high-resolution PWM module, a 10-bit 2 Msps Analog-to-Digital Converter module and an Analog Comparator module.

The dsPIC30F SMPS DSCs include the following specific devices:

- dsPIC30F1010
- dsPIC30F2020
- dsPIC30F2023

Following is a roadmap to specific information about these devices:

| For Information About:                | See This Section:   |
|---------------------------------------|---------------------|
| Device Overview                       | Part I, Section 1   |
| CPU                                   | Part I, Section 2   |
| Data Memory                           | Part I, Section 3   |
| Program Memory                        | Part I, Section 4   |
| FLASH and EEPROM Programming          | Part I, Section 5   |
| I/O Ports                             | Part I, Section 11  |
| Timers                                | Part I, Section 12  |
| Input Capture Module                  | Part I, Section 13  |
| Output Compare Module                 | Part I, Section 14  |
| I <sup>2</sup> C Module               | Part I, Section 21  |
| Development Tool Support              | Part I, Section 25  |
| CodeGuard™ Security                   | Part I, Section 26  |
| Interrupts                            | Part II, Section 28 |
| Oscillator                            | Part II, Section 29 |
| Power Supply PWM                      | Part II, Section 30 |
| 10-bit 2 Msps A/D Converter           | Part II, Section 31 |
| Analog Comparator Module              | Part II, Section 32 |
| Device Configuration                  | Part II, Section 33 |
| UART                                  | Part II, Section 34 |
| SPI                                   | Part II, Section 35 |
| Watchdog Timer and Power-Saving Modes | Part II, Section 36 |

NOTES: