6

Power Manager

Contents

```
About the Power Manager
                             6-4
  The Power-Saver State
                            6-6
 The Idle State
 The Sleep State
                     6-8
 The Sleep Queue
                      6-9
  Sleep Requests
                    6-10
  Sleep Demands
                     6-10
  Wakeup Demands
                        6-11
  Sleep-Request Revocations
                                6-12
  Power Manager Dispatch
                               6-12
Using the Power Manager
                             6-13
  Determining Whether the Power Manager Is Present
                                                        6-14
  Determining Whether the Power Manager Dispatch Routines are
 Present
             6-14
 Enabling or Disabling the Idle State
                                        6-15
  Setting, Disabling, and Reading the Wakeup Timer
                                                       6-16
 Installing a Sleep Procedure
                                 6-18
  Using Application Global Variables in Sleep Procedures
                                                           6-19
  Writing a Sleep Procedure
                               6-20
  Switching Serial Power On and Off
                                        6-25
                                                6-26
  Monitoring the Battery and Battery Charger
Power Manager Reference
                             6-26
  Data Structures
    Sleep Queue Record
                            6-26
                                   6-27
    Hard Disk Queue Structure
    Wakeup Time Structure
                               6-27
    Battery Information Structure
                                     6-27
                              6-28
    Battery Time Structure
                               6-28
 Power Manager Routines
    Controlling the Idle State
                                6-28
```

Contents 6-1

Controlling and Reading the Wakeup Timer 6-31 Controlling the Sleep Queue 6-33 Controlling Serial Power Reading the Status of the Internal Modem 6-36 6-38 Reading the Status of the Battery and the Battery Charger Power Manager Dispatch Routines 6-40 Determining the Power Manager Features Available 6-40 Controlling the Sleep and Wakeup Timers Controlling the Dimming Timer Controlling the Hard Disk Getting Information About the Internal Batteries 6-54 Controlling the Internal Modem 6-58 Controlling the Processor 6-60 Getting and Setting the SCSI ID 6-63 **Application-Defined Routines** 6-65 Sleep Procedures 6-65 6-66 Hard Disk Spindown Function Summary of the Power Manager 6-67 Pascal Summary 6-67 Constants 6-69 Data Types **Power Manager Routines** 6-70 6-70 Power Manager Dispatch Routines **Application-Defined Routines** 6-72 C Summary 6-72 Constants and Data Types 6-72 **Power Manager Functions** 6-75 6-76 Power Manager Dispatch Functions 6-77 **Application-Defined Functions** 6-77 Assembly-Language Summary **Data Structures** 6-77 6-78 Trap Macros **Result Codes** 6-80

6-2 Contents