List of Examples

Example 2-1 Testing the Hardware Inventory in a Shell Script 31
Example 2-2 Function Returning Type Code for CPU Module 31
Example 4-1 Opening and Using a Hypothetical VME Device 65
Example 4-2 User-Level DMA Access to VME 74
Example 5-1 Testing the Generic SCSI Configuration 89
Example 5-2 Code of the testunitread00() Function 102
Example 5-3 Program That Uses dslib Functions 103
Example 6-1 Function to Test and Set External Interrupt Pulse Width 117
Example 7-1 Hypothetical ULI Program 129
Example 8-1 Hypothetical pfxread() entry in a Character/Block Driver 153
Example 8-2 *pfx*poll() Code for Hypothetical Driver 157
Example 8-3 Edited Fragment of flash_map() 161
Example 8-4 Hypothetical Call to pollwakeup() 166
Example 8-5 Entry Point pfxprint() 169
Example 8-6 Uniprocessor Upper-Half Wait Logic 176
Example 8-7 Uniprocessor Interrupt Logic 177
Example 9-1 LIFO Queue Using Basic Locks 206
Example 9-2 Skeleton Code for Use of SV_WAIT 221
Example 11-1 Verifying Presence of symmon 244
Example 11-2 Setting Kernel putbuf Size 250
Example 11-3 Debugging Macros Using cmn_err() 251
Example 11-4 More Elaborate Debugging Macro 251
Example 11-5 Invoking idbg Interactively 262
Example 11-6 Invoking idbg with a Log File 263
Example 11-7 Invoking idbg for a Single Command 263
Example 12-1 Compiling the Example Driver for a 32-bit Kernel 272
Example 12-2 Displaying Simulated Volume Header Using idbg 274

Example 12-3 Install Command to Create Device Special File 275
Example 12-4 Applying prtvtoc to a RAM Drive of 2 MB 276
Example 12-5 Making a Filesystem on a RAM Drive 276
Example 12-6 Mounting a RAM Drive Filesystem 277
Example 14-1 Comparing pio_badaddr() to pio_badaddr_val() 327
Example 14-2 Example VME Character Driver 335
Example 15-1 Storing the Adapter Type Number in pfxedtinit() 359
Example 15-2 Extracting an Adapter Number From a Minor Device Number 360
Example 15-3 Macro to Encapsulate a Call to scsi_alloc() 360
Example 16-1 Input Queueing Using Locking Macros 399
Example 16-2 Interrupt Handling Using Locking Macros 400
Example 16-3 Skeleton ifnet Driver 401
Example 17-1 Sketch of EISA Initialization 447
Example 17-2 Master File /var/sysgen/rap for RAP-10 Driver 449
Example 17-3 Configuration File /var/sysgen/rap.sm for RAP-10 Driver 450
Example 17-4 Installation Script for RAP-10 Driver 450
Example 17-5 Program to Test RAP-10 Driver 450
Example 17-6 Complete EISA Character Driver for RAP-10 452
Example 18-1 GIO Driver edtinit() Entry Point 518
Example 18-2 Hypothetical PIO Routine for GIO 520
Example 18-3 Strategy Code for Hypothetical Scatter/Gather GIO Device 522
Example 18-4 Strategy() Code for GIO Device Without Scatter/Gather 524
Example 18-5 Disabling SysAD Parity Checking During PIO 527
Example 18-6 Complete Driver for Hypothetical GIO Device 528
Example 19-1 Testing Pipe Configuration 549