

avr32, flags 0x00000112:  
EXEC\_P, HAS\_SYMS, D\_PAGED  
start address 0xa0000000

# Program Header:

```
LOAD off 0x00001000 vaddr 0xa0000000 paddr 0x00000000 align 2**12
  filesz 0x000092c0 memsz 0x000092c0 flags r-x
LOAD off 0x0000a400 vaddr 0xa0009400 paddr 0x000092c0 align 2**12
  filesz 0x00000e00 memsz 0x00000e00 flags r-x
LOAD off 0x0000c000 vaddr 0x10000000 paddr 0x0000a0c0 align 2**12
  filesz 0x000008c8 memsz 0x00000968 flags rw-
LOAD off 0x0000d000 vaddr 0x11fff000 paddr 0x0000aa28 align 2**12
  filesz 0x00000000 memsz 0x00001000 flags rw-
LOAD off 0x0000d000 vaddr 0x24007000 paddr 0x0000ba28 align 2**12
  filesz 0x00000000 memsz 0x00001000 flags rw-
```

private flags = 0:

# Sections:

Idx	Name	Size	VMA	LMA	File off	Algn
0	.reset	00000008	a0000000	00000000	00001000	2**2
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
1	.rela.got	00000000	a0000008	00000008	00001008	2**2
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
2	.text	00009234	a0000008	00000008	00001008	2**2
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
3	.rodata	00000084	a000923c	0000923c	0000a23c	2**2
	CONTENTS, ALLOC, LOAD, READONLY, DATA					
4	.gcc_except_table	00000e00	a0009400	000092c0	0000a400	2**9
	CONTENTS, ALLOC, LOAD, READONLY, CODE					
5	.data	000008c8	10000000	0000a0c0	0000c000	2**2
	CONTENTS, ALLOC, LOAD, DATA					
6	.bss	000000a0	100008c8	0000a988	0000c8c8	2**2
	ALLOC					
7	.comment	00000ba6	00000000	00000000	0000c8c8	2**0
	CONTENTS, READONLY					
8	.debug_aranges	00000fe0	00000000	00000000	0000d46e	2**0
	CONTENTS, READONLY, DEBUGGING					
9	.debug_pubnames	0000182b	00000000	00000000	0000e44e	2**0
	CONTENTS, READONLY, DEBUGGING					
10	.debug_info	00033baf	00000000	00000000	0000fc79	2**0
	CONTENTS, READONLY, DEBUGGING					
11	.debug_abbrev	00005881	00000000	00000000	00043828	2**0
	CONTENTS, READONLY, DEBUGGING					
12	.debug_line	0000d3c6	00000000	00000000	000490a9	2**0
	CONTENTS, READONLY, DEBUGGING					
13	.debug_frame	00002170	00000000	00000000	00056470	2**2
	CONTENTS, READONLY, DEBUGGING					
14	.debug_str	00002ac8	00000000	00000000	000585e0	2**0
	CONTENTS, READONLY, DEBUGGING					
15	.debug_loc	0000b7ce	00000000	00000000	0005b0a8	2**0
	CONTENTS, READONLY, DEBUGGING					
16	.debug_macinfo	00b61658	00000000	00000000	00066876	2**0
	CONTENTS, READONLY, DEBUGGING					
17	.hstack	00001000	11fff000	0000aa28	0000d000	2**0
	ALLOC					
18	.stack	00001000	24007000	0000ba28	0000d000	2**0
	ALLOC					
19	.debug_ranges	00000648	00000000	00000000	00bc7ece	2**0
	CONTENTS, READONLY, DEBUGGING					

# SYMBOL TABLE:

```
a0000000 1 d .reset 00000000 .reset
a0000008 1 d .rela.got 00000000 .rela.got
```

```
a0000008 1 d .text 00000000 .text
a000923c 1 d .rodata 00000000 .rodata
a0009400 1 d .gcc_except_table 00000000 .gcc_except_table
10000000 1 d .data 00000000 .data
100008c8 1 d .bss 00000000 .bss
00000000 1 d .comment 00000000 .comment
00000000 1 d .debug_aranges 00000000 .debug_aranges
00000000 1 d .debug_pubnames 00000000 .debug_pubnames
00000000 1 d .debug_info 00000000 .debug_info
00000000 1 d .debug_abbrev 00000000 .debug_abbrev
00000000 1 d .debug_line 00000000 .debug_line
00000000 1 d .debug_frame 00000000 .debug_frame
00000000 1 d .debug_str 00000000 .debug_str
00000000 1 d .debug_loc 00000000 .debug_loc
00000000 1 d .debug_macinfo 00000000 .debug_macinfo
11fff000 1 d .hstack 00000000 .hstack
24007000 1 d .stack 00000000 .stack
00000000 1 d .debug_ranges 00000000 .debug_ranges
a0000f78 1 .text 00000000 text_end_addr
a0000f7c 1 .text 00000000 data_start_addr
a0000f80 1 .text 00000000 data_end_addr
00000000 1 df *ABS* 00000000 system_call.c
00000000 1 df *ABS* 00000000 main_process_switch.c
10000000 1 O .data 00000004 nextPid
10000004 1 O .data 00000004 data_a
00000000 1 df *ABS* 00000000 port.c
00000000 1 df *ABS* 00000000 pcb.c
10000008 1 O .data 00000004 nextPid
1000000c 1 O .data 00000004 cnt
00000000 1 df *ABS* 00000000 init.c
00000000 1 df *ABS* 00000000 usart.c
10000010 1 O .data 00000004 usart_base
00000000 1 df *ABS* 00000000 syscalls.c
100008e0 1 O .bss 00000004 cur_heap_pos.2852
00000000 1 df *ABS* 00000000 interrupts.c
00000000 1 df *ABS* 00000000 exception_handling.c
00000000 1 df *ABS* 00000000 usart.c
a0001994 1 F .text 000000c2 usart_set_baudrate
00000000 1 df *ABS* 00000000 pio.c
00000000 1 df *ABS* 00000000 uart_driver.c
10000018 1 O .data 00000004 usart1
1000001c 1 O .data 00000004 cpu_hz
a0001f5c 1 O .text 00000004 C.0.9432
10000900 1 O .bss 0000000c opt
100008f0 1 O .bss 00000010 device_uid
00000000 1 df *ABS* 00000000 leds_driver.c
1000090c 1 O .bss 00000008 device_uid
00000000 1 df *ABS* 00000000 device_driver.c
100000b0 1 O .data 00000004 new_dev_id
00000000 1 df *ABS* 00000000 process2.c
00000000 1 df *ABS* 00000000 process1.c
00000000 1 df *ABS* 00000000 errno.c
00000000 1 df *ABS* 00000000 exit.c
00000000 1 df *ABS* 00000000 fflush.c
00000000 1 df *ABS* 00000000 findfp.c
a000260c 1 F .text 00000038 std
00000000 1 df *ABS* 00000000 fwalk.c
00000000 1 df *ABS* 00000000 impure.c
100000b8 1 O .data 00000400 impure_data
00000000 1 df *ABS* 00000000 malloc.c
00000000 1 df *ABS* 00000000 mallocr.c
00000000 1 df *ABS* 00000000 memset.c
00000000 1 df *ABS* 00000000 mlock.c
```

```
00000000 1 df *ABS* 00000000 printf.c
00000000 1 df *ABS* 00000000 sbrkr.c
00000000 1 df *ABS* 00000000 stdio.c
00000000 1 df *ABS* 00000000 strcpy.c
00000000 1 df *ABS* 00000000 vfprintf.c
a00030fc 1 F .text 0000042c get_arg
a0003528 1 F .text 00000028 __sprint_r
a0002f04 1 O .text 00000100 chclass
a0003004 1 O .text 0000006c state_table
a0003070 1 O .text 0000006c action_table
a00030dc 1 O .text 00000010 blanks.3643
a00030ec 1 O .text 00000010 zeroes.3644
00000000 1 df *ABS* 00000000 writer.c
00000000 1 df *ABS* 00000000 wsetup.c
00000000 1 df *ABS* 00000000 __call_atexit.c
00000000 1 df *ABS* 00000000 closer.c
00000000 1 df *ABS* 00000000 dtoa.c
a0005cc8 1 F .text 0000014c quorem
00000000 1 df *ABS* 00000000 fclose.c
00000000 1 df *ABS* 00000000 mallocr.c
00000000 1 df *ABS* 00000000 fvwwrite.c
00000000 1 df *ABS* 00000000 locale.c
a0007224 1 O .text 00000004 charset
a0007228 1 O .text 00000030 lconv
00000000 1 df *ABS* 00000000 lseekr.c
00000000 1 df *ABS* 00000000 makebuf.c
00000000 1 df *ABS* 00000000 memchr.c
00000000 1 df *ABS* 00000000 memmove.c
00000000 1 df *ABS* 00000000 mprec.c
a00075d0 1 O .text 0000000c p05.2619
00000000 1 df *ABS* 00000000 readr.c
00000000 1 df *ABS* 00000000 mallocr.c
00000000 1 df *ABS* 00000000 s_isinfd.c
00000000 1 df *ABS* 00000000 s_isnand.c
00000000 1 df *ABS* 00000000 strlen.c
00000000 1 df *ABS* 00000000 mallocr.c
00000000 1 df *ABS* 00000000 fstatr.c
a0008418 1 .text 00000000 __avr32_f64_mul_op1_zero
a00082f6 1 .text 00000000 __avr32_f64_mul_op1_subnormal
a000833a 1 .text 00000000 __avr32_f64_mul_op2_subnormal
a000837e 1 .text 00000000 __avr32_f64_mul_op_nan_or_inf
a00083a6 1 .text 00000000 __avr32_f64_mul_res_subnormal
a0008408 1 .text 00000000 __avr32_f64_mul_res_inf
a00083f8 1 .text 00000000 __avr32_f64_mul_res_zero
a00083a0 1 .text 00000000 __avr32_f64_mul_op1_not_naninf
a0008402 1 .text 00000000 __avr32_f64_mul_res_nan
a0008438 1 .text 00000000 __avr32_f64_sub_from_add
a00085d4 1 .text 00000000 __avr32_f64_add_from_sub
a0008506 1 .text 00000000 __avr32_f64_sub_opL_subnormal
a0008488 1 .text 00000000 __avr32_f64_sub_opL_subnormal_done
a000852c 1 .text 00000000 __avr32_f64_sub_opH_nan_or_inf
a00084b4 1 .text 00000000 __avr32_f64_sub_shift_done
a0008594 1 .text 00000000 __avr32_f64_sub_longshift
a00084da 1 .text 00000000 __avr32_f64_sub_longnormalize_done
a00085b2 1 .text 00000000 __avr32_f64_sub_longnormalize
a000854a 1 .text 00000000 __avr32_f64_sub_subnormal_result
a00084ec 1 .text 00000000 __avr32_f64_sub_round
a0008542 1 .text 00000000 __avr32_f64_sub_return_nan
a00086cc 1 .text 00000000 __avr32_f64_add_op2_subnormal
a0008664 1 .text 00000000 __avr32_f64_add_opH_nan_or_inf
a000863c 1 .text 00000000 __avr32_f64_add_shift_done
a0008692 1 .text 00000000 __avr32_f64_add_longshift
a00086ae 1 .text 00000000 __avr32_f64_add_res_of
```

```
a0008648 l      .text 00000000 __avr32_f64_add_res_of_done
a000864e l      .text 00000000 __avr32_f64_add_round
a000868a l      .text 00000000 __avr32_f64_add_return_nan
a0008676 l      .text 00000000 __avr32_f64_add_opL_nan_or_inf
a00087fe l      .text 00000000 __floatsidf_return_opl
a0008b44 l      .text 00000000 __avr32_f64_div_res_subnormal
a0008a5a l      .text 00000000 __avr32_f64_div_round_subnormal
a0008bf4 l      .text 00000000 __avr32_f64_div_opl_zero
00000000 l      df *ABS* 00000000 libgcc2.c
00000000 l      df *ABS* 00000000 libgcc2.c
a000a154 l      .gcc_except_table 00000000 _handle_exception
a000a132 l      .gcc_except_table 00000000 _handle_breakpoint
a000a180 l      .gcc_except_table 00000000 _handle_scall
a000a14a l      .gcc_except_table 00000000 _breakpoint_unhandled
a000a16a l      .gcc_except_table 00000000 _exception_return
a000a176 l      .gcc_except_table 00000000 _exception_unhandled
a000a18c l      .gcc_except_table 00000000 _int_disable
a000a19c l      .gcc_except_table 00000000 _int_enable
00000000 l      df *ABS* 00000000 system_call_api.c
00000000 l      df *ABS* 00000000 sched.c
00000000 l      df *ABS* 00000000 halos.c
00000000 l      df *ABS* 00000000 cpu.c
00000000 l      df *ABS* 00000000 gdi_api.c
00000000 l      df *ABS* 00000000 pm.c
00000000 l      df *ABS* 00000000 mmu_exceptions.c
00000000 l      df *ABS* 00000000 mmu.c
00000000 l      df *ABS* 00000000 gdi_driver.c
00000000 l      df *ABS* 00000000 halosUtil.c
00000000 l      df *ABS* 00000000 Time.c
00000000 l      df *ABS* 00000000 strlcpy.c
00000000 l      df *ABS* 00000000 reent.c
10000020 g      O .data 00000090 actDevices
a000a11a g      .gcc_except_table 00000000 _int2
a0007604 g      O .text 00000028 __mprec_tinytens
a0002ea8 g      F .text 0000005c strcpy
a0000260 g      F .text 00000024 start_first_process
a0000870 g      F .text 00000128 ClkSelect
a0007264 g      F .text 00000034 _lseek_r
a0002db4 g      F .text 00000024 printf
a0002e18 g      F .text 0000002c __sseek
a0002648 g      F .text 00000054 __sinit
a0002db2 g      F .text 00000002 __malloc_unlock
a0008896 g      F .text 00000000 __avr32_f64_cmp_lt
10000014 g      O .data 00000004 __intc_base__
a00006bc g      F .text 0000002c clk_switch
100008d0 g      O .bss 00000004 pcb2
a000746e g      F .text 00000098 memmove
a00077b8 g      F .text 00000058 _Balloc
a0000814 g      F .text 0000005c GClkSetup
a000249c g      F .text 0000000c __errno
a00022fc g      F .text 00000020 generate_dev_uid
a0000008 g      F .text 000000d8 scall_Handler
a000213c g      F .text 00000038 leds_driver_init
100008d4 g      O .bss 00000004 pcb3
a0008228 g      F .text 00000034 _fstat_r
10000960 g      O .bss 00000004 errno
a0001d48 g      F .text 00000090 pioGetHandle
10000948 g      O .bss 00000004 processStarted
a000825c g      F .text 00000000 __avr32_f64_mul
a0007420 g      F .text 00000000 memcpy
a0001c3a g      F .text 00000060 usart_read_char
a0001f00 g      F .text 0000005c pio_enable_module
a0001454 w      F .text 00000090 _handle_interrupt
```

```
a000269c g F .text 00000014 _cleanup_r
a00088f8 g F .text 00000000 __avr32_f64_div
11ffff00 g .hstack 00000000 _hstack
a0002798 g F .text 00000018 malloc
a0002050 g F .text 00000070 uart_driver_read_byte
a00010ee w F .text 00000016 isatty
a00005c8 g F .text 000000f4 init_ngw100
a0001104 w F .text 0000001a _fstat
a000133c g F .text 00000020 set_interrupts_base
a0007508 g O .text 000000c8 __mprec_tens
10000914 g O .bss 00000004 __malloc_top_pad
100008d8 g O .bss 00000004 flag
1000094c g O .bss 00000004 globalI
a000012c g F .text 000000b8 rtc_int_handler
a000a104 g .gcc_except_table 00000000 _int0
11ffff00 g *ABS* 00000000 __heap_end__
a0007258 g F .text 0000000c _localeconv_r
a0007bb8 g F .text 0000001c __i2b
a0006f5c g F .text 000002c8 __sfvwrite_r
a0002dd8 g F .text 00000030 _sbrk_r
a0007d1c g F .text 00000034 _read_r
10000950 g O .bss 00000004 globalVar2
a0006bd8 g F .text 000000c4 _fclose_r
a00025dc g F .text 00000030 fflush
10000940 g O .bss 00000004 __malloc_max_sbrked_mem
a0008f1c g F .text 00000320 __umoddi3
a000a000 w .gcc_except_table 00000000 _evba
a000277c g O .text 00000004 _global_impure_ptr
a0007d50 g F .text 000003d0 _realloc_r
a0000ce4 g F .text 00000098 Get_HSB_Clk
a0008c0c g F .text 00000310 __udivdi3
a00075dc g O .text 00000028 __mprec_bigtens
a0001120 w F .text 00000078 _sbrk
a000777e g F .text 00000038 __mcmp
100008ec g O .bss 00000004 handler_table
a0001bf8 g F .text 00000042 usart_write_char
100008dc g O .bss 00000004 flag2
a000883c g F .text 00000000 __avr32_f64_cmp_ge
a00001e4 g F .text 0000007a InitRTC
a0007640 g F .text 00000088 __hi0bits
a0002100 g F .text 0000003c uart_driver_close
10000954 g O .bss 00000004 globalVar1
100008c8 g O .bss 00000004 ptrCurrentPCB
a00020c0 g F .text 00000040 uart_driver_write_byte
a00086ec g F .text 00000000 __avr32_f64_to_s32
a00086e8 g F .text 00000000 __avr32_f64_to_u32
a0007c6c g F .text 000000b0 __pow5mult
a0001dd8 g F .text 00000128 pio_setup_pin
10000958 g O .bss 00000004 i
a0000368 g F .text 0000014a ptr_uc_init_stack
a0002644 g F .text 00000002 __sfp_lock_acquire
a000737c g F .text 000000a4 memchr
a000168c w F .text 00000048 handle_scall
a0001958 g F .text 0000003c usart_reset
a0006d5c g F .text 00000200 _free_r
100008e8 g O .bss 00000004 int_initialized
a00006e8 g F .text 00000048 ClkSwitch
a0005bd4 g F .text 000000c4 __call_exitprocs
100008c0 g O .data 00000004 __malloc_sbrk_base
a0000000 g F .reset 00000000 _start
100008e4 g O .bss 00000004 int_handler_table
a0000534 g F .text 00000094 allocatePCBAndStack
a0002354 g F .text 00000080 open_driver
```

```
a00011bc w F .text 0000002c _lseek
a00079c0 g F .text 000000bc __lshift
a0008722 g F .text 00000000 __avr32_s32_to_f64
a0001a58 g F .text 000001a0 usart_init_rs232
a0002492 g F .text 00000008 user_process1
12000000 g .hstack 00000000 _hstack
a00016d4 w F .text 000001fc unhandled_exception
a0007a7c g F .text 0000013c __multiply
a0002228 g F .text 0000007c leds_driver_set_bit
10000918 g O .bss 00000028 __malloc_current_mallinfo
a0007810 g F .text 000000d4 __d2b
a0000fb0 g F .text 0000003c usart_putc
a0000c4c g F .text 00000098 Get_CPU_Clk
a0005c98 g F .text 00000030 _close_r
a0005b08 g F .text 000000cc __swsetup_r
100004b8 g O .data 00000408 __malloc_av_
a0002e80 g F .text 00000028 __sread
a0000dcc g F .text 00000078 delay_us
a0002db0 g F .text 00000002 __malloc_lock
a00024d4 g F .text 00000108 _fflush_r
a00081b8 g F .text 00000070 _calloc_r
a0001668 w F .text 00000024 _register_scall_handler
a00022a4 g F .text 00000058 leds_driver_close
100008c8 g *ABS* 00000000 __bss_start
a0002d50 g F .text 00000060 memset
a0000284 g F .text 000000e4 main
a0001370 w F .text 000000e4 init_interrupts
a0001f60 g F .text 0000007c uart_driver_init
10000944 g O .bss 00000004 __malloc_max_total_mem
a0008c0c g F .text 00000310 __avr32_udiv64
a0002e08 g F .text 00000010 __sclose
a0006c9c g F .text 00000018 fclose
a0005e14 g F .text 00000dc4 _dtoa_r
a00027b0 g F .text 000005a0 _malloc_r
10000968 g *ABS* 00000000 __heap_start__
a000843c g F .text 00000000 __avr32_f64_sub
a0002718 g F .text 00000064 _fwalk
a00014e4 w F .text 00000184 register_interrupt
a0006cb4 g F .text 000000a8 _malloc_trim_r
a00004b4 g F .text 00000080 processCreate
a000241a g F .text 00000032 write_driver
a00010d8 w F .text 00000016 unimplemented_syscall
a0005ad4 g F .text 00000034 _write_r
a00085d8 g F .text 00000000 __avr32_f64_add
100000b4 g O .data 00000004 _impure_ptr
100008cc g O .bss 00000004 pcb1
10000000 g *ABS* 00000000 _data
a0008120 g F .text 0000002c __isinf
24008000 g .stack 00000000 _estack
a00012ac w F .text 00000090 _write
100008c8 g *ABS* 00000000 _edata
a0000e44 g F .text 000000f0 SDRAMC_Init
10000968 g *ABS* 00000000 _end
a0002174 g F .text 000000b4 leds_driver_open
a000a200 g .data 00000000 _data_lma
a000871a g F .text 00000000 __avr32_u32_to_f64
a0002e44 g F .text 0000003c __swrite
```