

new/usr/src/uts/common/io/sata/adapters/ahci/ahci.c

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337453 Tue Jan 15 10:23:16 2019
new/usr/src/uts/common/io/sata/adapters/ahci/ahci.c
10091 smatch fixes for ahci.c
*****
_____unchanged_portion_omitted_____

6106 /*
6107  * Allocate the ahci_port_t including Received FIS and Command List.
6108  * The argument - port is the physical port number, and not logical
6109  * port number seen by the SATA framework.
6110  */
6111 static int
6112 ahci_alloc_port_state(ahci_ctl_t *ahci_ctlp, uint8_t port)
6113 {
6114     dev_info_t *dip = ahci_ctlp->ahcictl_dip;
6115     ahci_port_t *ahci_portp;
6116     char taskq_name[64] = "event_handle_taskq";

6118     ASSERT(MUTEX_HELD(&ahci_ctlp->ahcictl_mutex));

6120     ahci_portp =
6121         (ahci_port_t *)kmem_zalloc(sizeof (ahci_port_t), KM_SLEEP);

6123     ahci_ctlp->ahcictl_ports[port] = ahci_portp;
6124     ahci_portp->ahciport_port_num = port;

6126     /* Initialize the port condition variable */
6127     cv_init(&ahci_portp->ahciport_cv, NULL, CV_DRIVER, NULL);

6129     /* Initialize the port mutex */
6130     mutex_init(&ahci_portp->ahciport_mutex, NULL, MUTEX_DRIVER,
6131         (void *) (uintptr_t) ahci_ctlp->ahcictl_intr_pri);

6133     mutex_enter(&ahci_portp->ahciport_mutex);

6135     /*
6136     * Allocate memory for received FIS structure and
6137     * command list for this port
6138     */
6139     if (ahci_alloc_rcvd_fis(ahci_ctlp, ahci_portp) != AHCI_SUCCESS) {
6140         goto err_case1;
6141     }

6143     if (ahci_alloc_cmd_list(ahci_ctlp, ahci_portp) != AHCI_SUCCESS) {
6144         goto err_case2;
6145     }

6147     /* Setup PxCMD.CLB, PxCMD.CLBU, PxCMD.FB, and PxCMD.FBU */
6148     if (ahci_setup_port_base_addresses(ahci_ctlp, ahci_portp) !=
6149         AHCI_SUCCESS) {
6150         goto err_case3;
6151     }

6153     (void) snprintf(taskq_name + strlen(taskq_name),
6154         sizeof (taskq_name) - strlen(taskq_name),
6155         "_port%d", port);

6157     /* Create the taskq for the port */
6158     if ((ahci_portp->ahciport_event_taskq = ddi_taskq_create(dip,
6159         taskq_name, 2, TASKQ_DEFAULTPRI, 0)) == NULL) {
6160         cmn_err(CE_WARN, "!ahci%d: ddi_taskq_create failed for event "
6161             "handle", ddi_get_instance(ahci_ctlp->ahcictl_dip));
6162         goto err_case3;
6163     }
}
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6165     /* Allocate the argument for the taskq */
6166     ahci_portp->ahciport_event_args =
6167         kmem_zalloc(sizeof (ahci_event_arg_t), KM_SLEEP);

6169     ahci_portp->ahciport_event_args->ahciea_addrp =
6170         kmem_zalloc(sizeof (ahci_addr_t), KM_SLEEP);

6172     if (ahci_portp->ahciport_event_args == NULL)
6173         goto err_case4;

6172     /* Initialize the done queue */
6173     ahci_portp->ahciport_doneq = NULL;
6174     ahci_portp->ahciport_doneqtail = &ahci_portp->ahciport_doneq;
6175     ahci_portp->ahciport_doneq_len = 0;

6177     mutex_exit(&ahci_portp->ahciport_mutex);

6179     return (AHCI_SUCCESS);

6184 err_case4:
6185     ddi_taskq_destroy(ahci_portp->ahciport_event_taskq);

6181 err_case3:
6182     ahci_dealloc_cmd_list(ahci_ctlp, ahci_portp);

6184 err_case2:
6185     ahci_dealloc_rcvd_fis(ahci_portp);

6187 err_case1:
6188     mutex_exit(&ahci_portp->ahciport_mutex);
6189     mutex_destroy(&ahci_portp->ahciport_mutex);
6190     cv_destroy(&ahci_portp->ahciport_cv);

6192     kmem_free(ahci_portp, sizeof (ahci_port_t));

6194     return (AHCI_FAILURE);
6195 }
_____unchanged_portion_omitted_____
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