

ACPI I2C Muxes

Describing an I2C device hierarchy that includes I2C muxes requires an ACPI Device () scope per mux channel.

Consider this topology:

```
+-----+ +-----+
| SMB1 |-->| MUX0 |--CH00--> i2c client A (0x50)
|         | | 0x70 |--CH01--> i2c client B (0x50)
+-----+ +-----+
```

which corresponds to the following ASL:

```
Device (SMB1)
{
    Name (_HID, ...)
    Device (MUX0)
    {
        Name (_HID, ...)
        Name (_CRS, ResourceTemplate () {
            I2cSerialBus (0x70, ControllerInitiated, I2C_SPEED,
                AddressingMode7Bit, "^SMB1", 0x00,
                ResourceConsumer,,)
        })
        Device (CH00)
        {
            Name (_ADR, 0)
            Device (CLIA)
            {
                Name (_HID, ...)
                Name (_CRS, ResourceTemplate () {
                    I2cSerialBus (0x50, ControllerInitiated, I2C_SPEED,
                        AddressingMode7Bit, "^CH00", 0x00,
                        ResourceConsumer,,)
                })
            }
        }
        Device (CH01)
        {
            Name (_ADR, 1)
            Device (CLIB)
            {
                Name (_HID, ...)
                Name (_CRS, ResourceTemplate () {
                    I2cSerialBus (0x50, ControllerInitiated, I2C_SPEED,
                        AddressingMode7Bit, "^CH01", 0x00,
                        ResourceConsumer,,)
                })
            }
        }
    }
}
```