Samsung GPIO implementation

Introduction

This outlines the Samsung GPIO implementation and the architecture specific calls provided alongside the drivers/gpio core.

S3C24XX (Legacy)

See Documentation/arm/samsung-s3c24xx/gpio.rst for more information about these devices. Their implementation has been brought into line with the core samsung implementation described in this document.

GPIOLIB integration

The gpio implementation uses gpiolib as much as possible, only providing specific calls for the items that require Samsung specific handling, such as pin special-function or pull resistor control.

GPIO numbering is synchronised between the Samsung and gpiolib system.

PIN configuration

Pin configuration is specific to the Samsung architecture, with each SoC registering the necessary information for the core gpio configuration implementation to configure pins as necessary.

The s3c_gpio_cfgpin() and s3c_gpio_setpull() provide the means for a driver or machine to change gpio configuration.

See arch/arm/mach-s3c/gpio-cfg.h for more information on these functions.