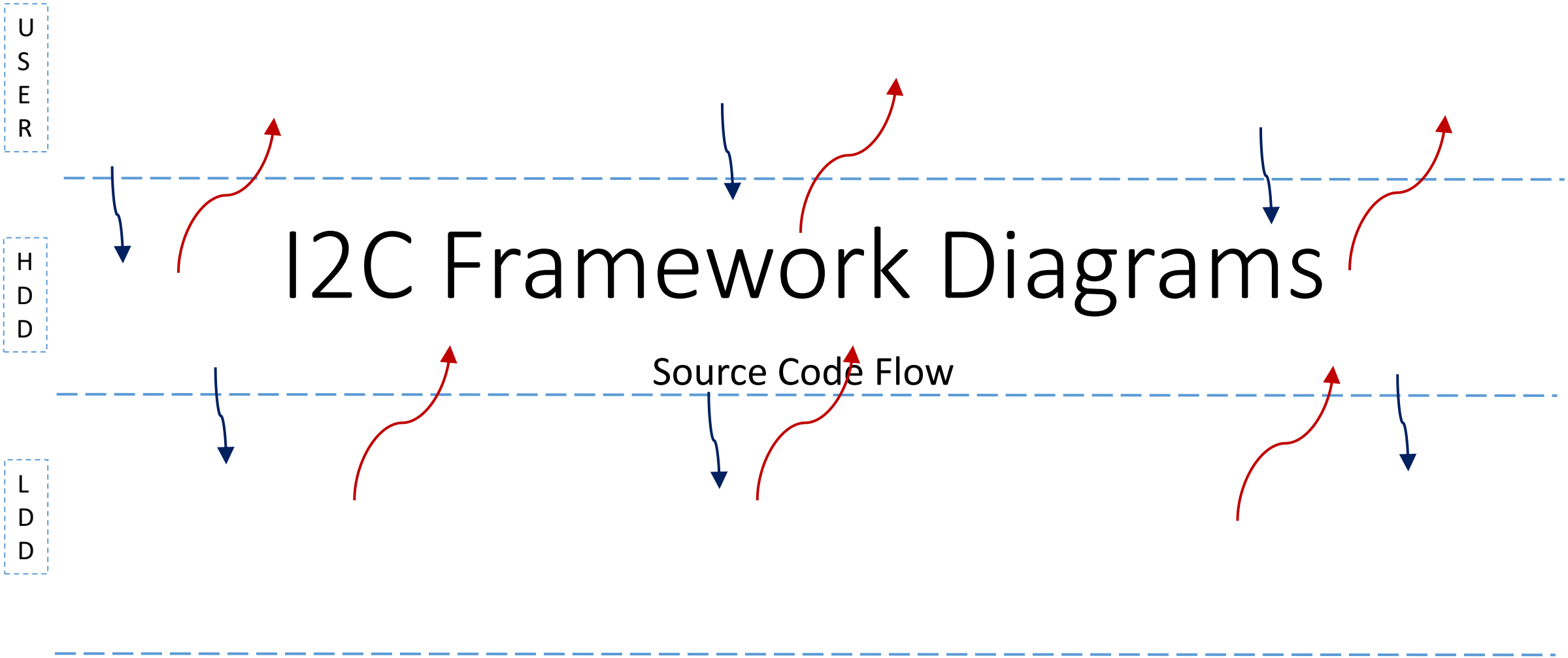
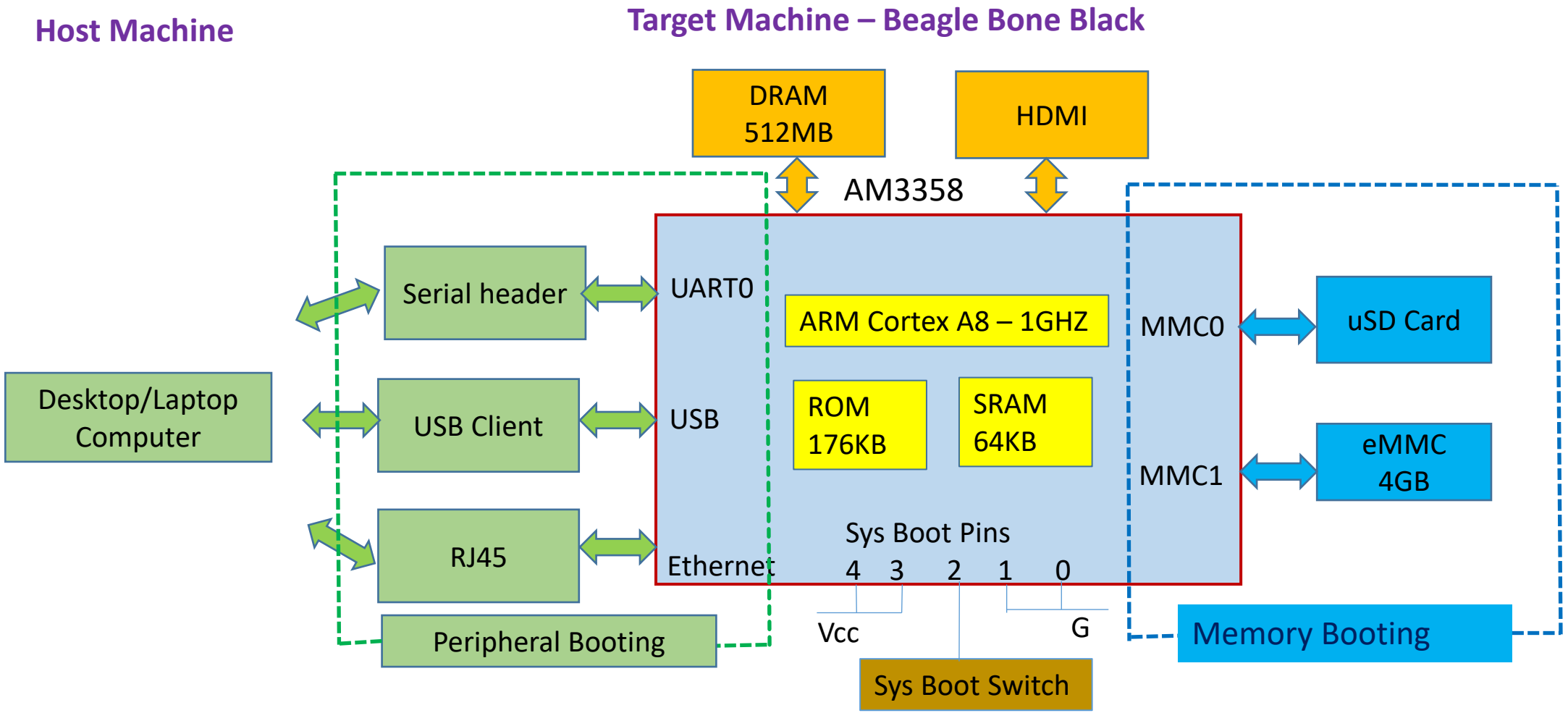


I2C Framework Diagrams

Source Code Flow

KERNEL MASTERS

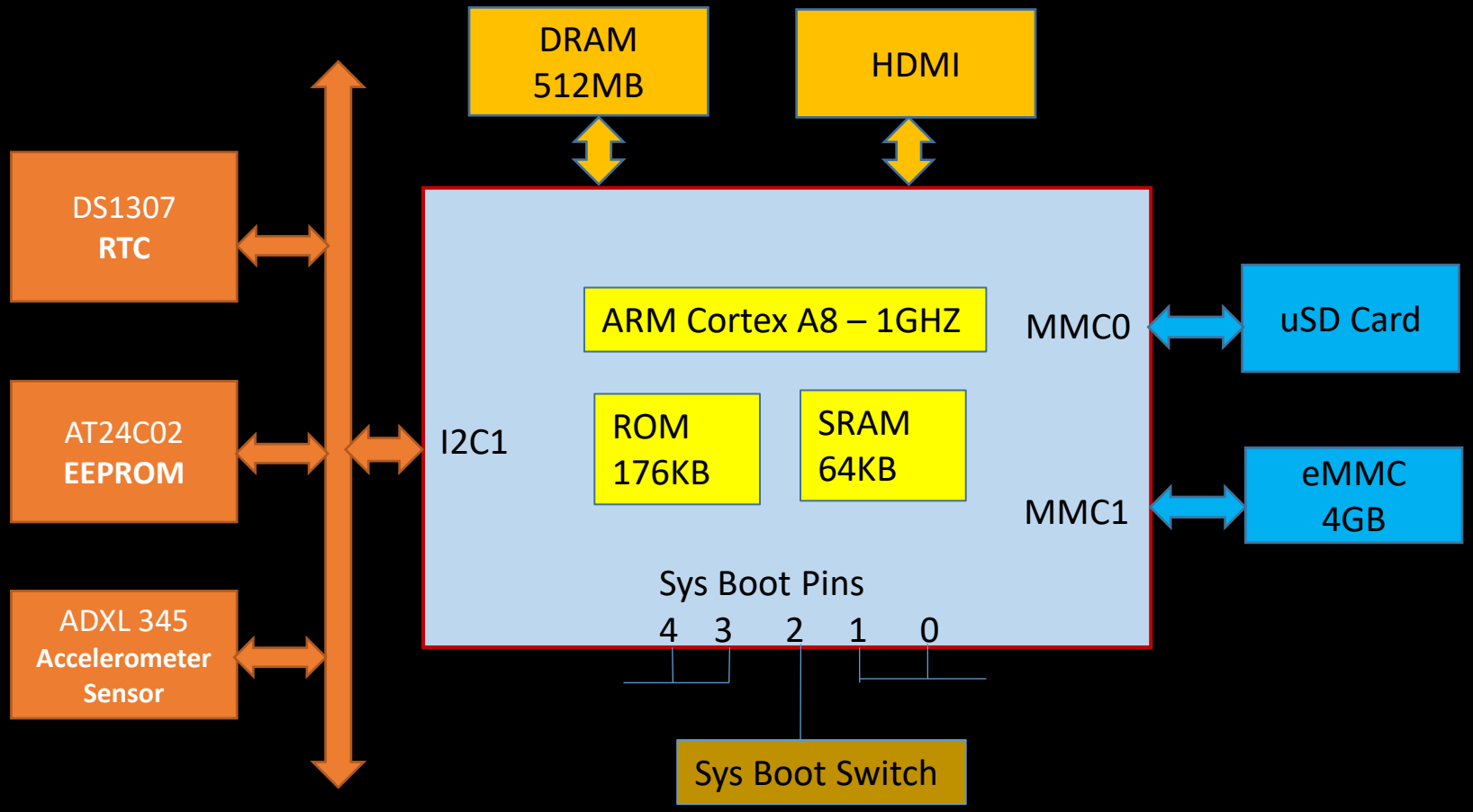
Embedded Linux Boot Sequence



Sysboot SW	Sysboot pins	1st Order	2nd Order	3rd Order	4th Order
OFF	11100	MMC1	MMC0	UART0	USB0
ON	11000	SPIO	MMC0	USB0	UART0

KERNEL MASTERS

I2C – AM335x Interface with Beagle Bone Black



Sysboot SW	Sysboot pins	1st Order	2nd Order	3rd Order	4th Order
OFF	11100	MMC1	MMC0	UART0	USB0
ON	11000	SPIO	MMC0	USB0	UART0

KERNEL MASTERS

I2C

AM335X I2C Controller Basic Framework

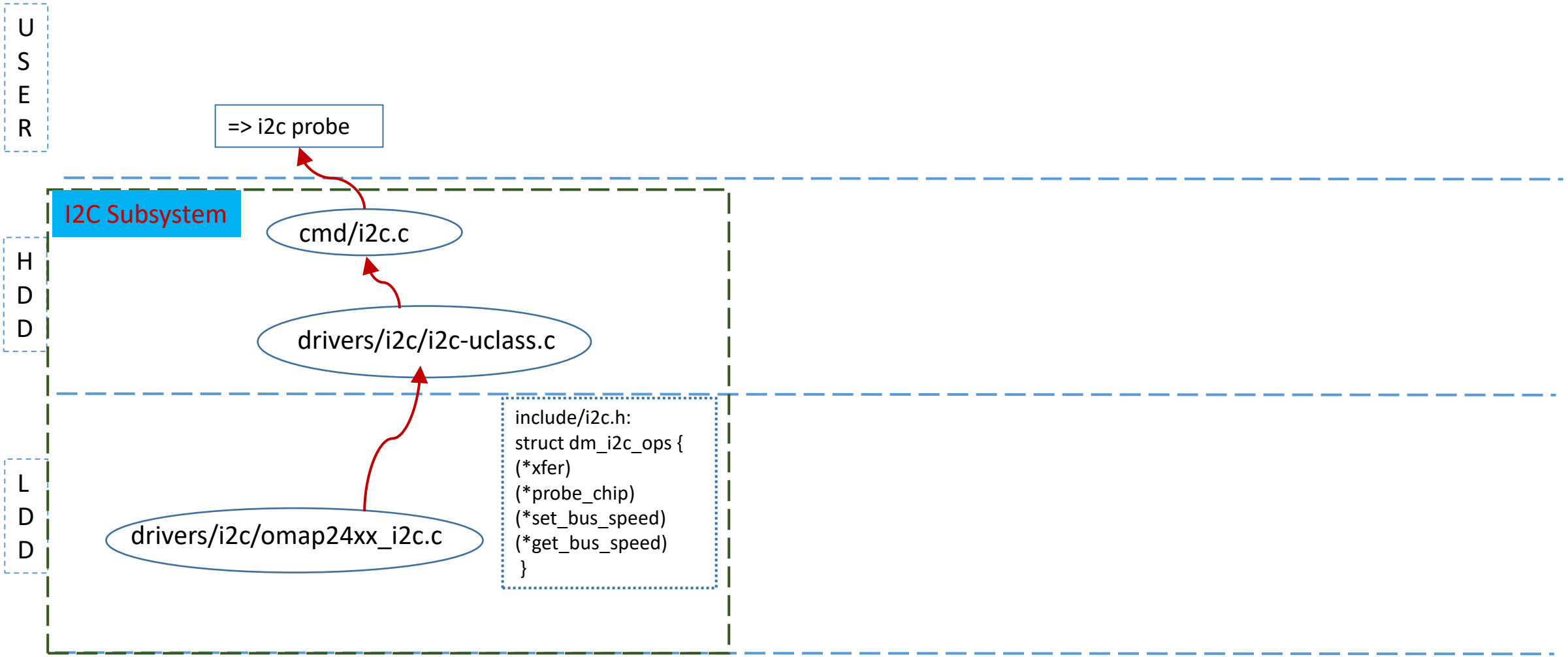
Framework

Two types of framework

1. I2C Driver Initialization
2. I2C Driver Operation

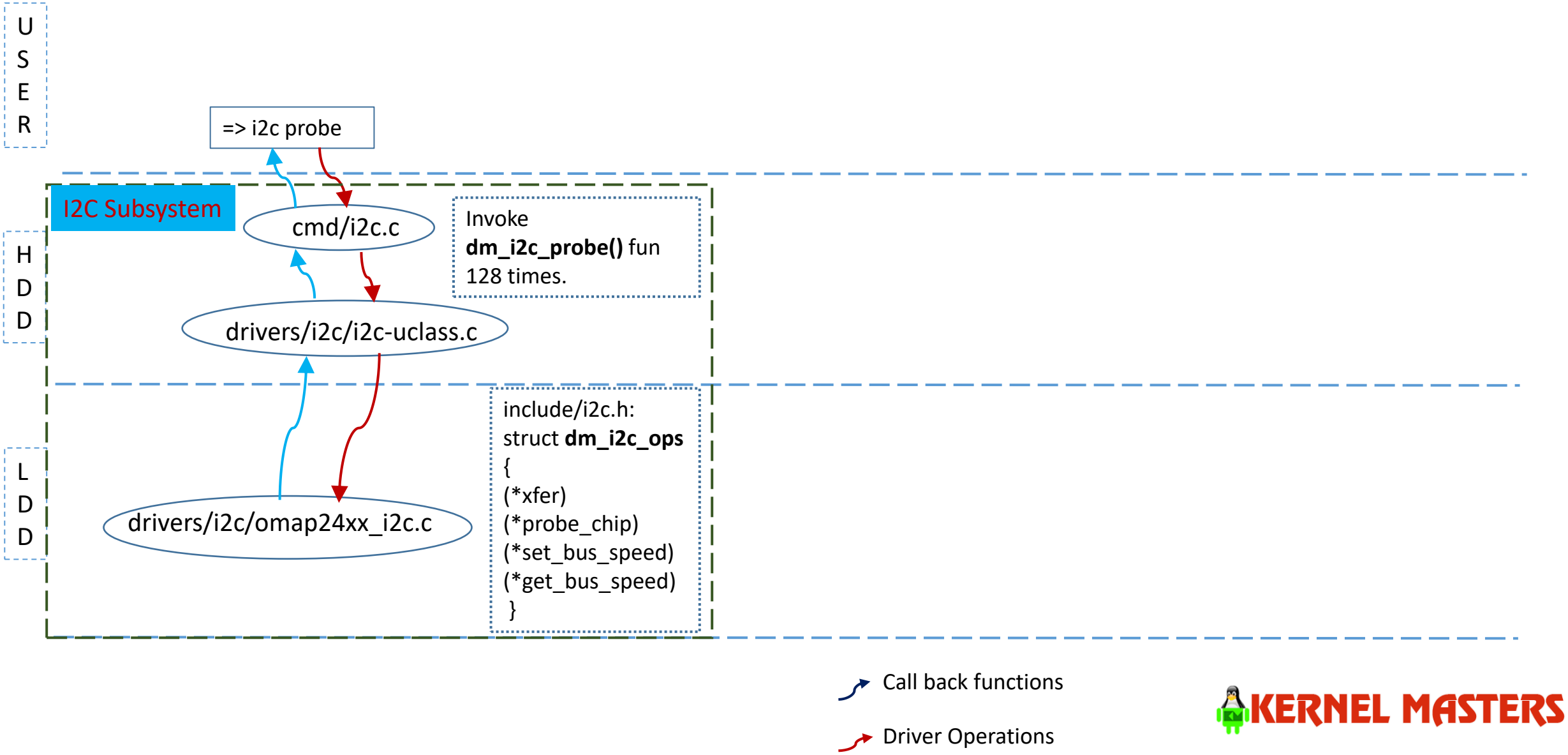
KERNEL MASTERS

I2C Master Initialization Framework in U-boot



KERNEL MASTERS

I2C Master Operation Framework in U-boot

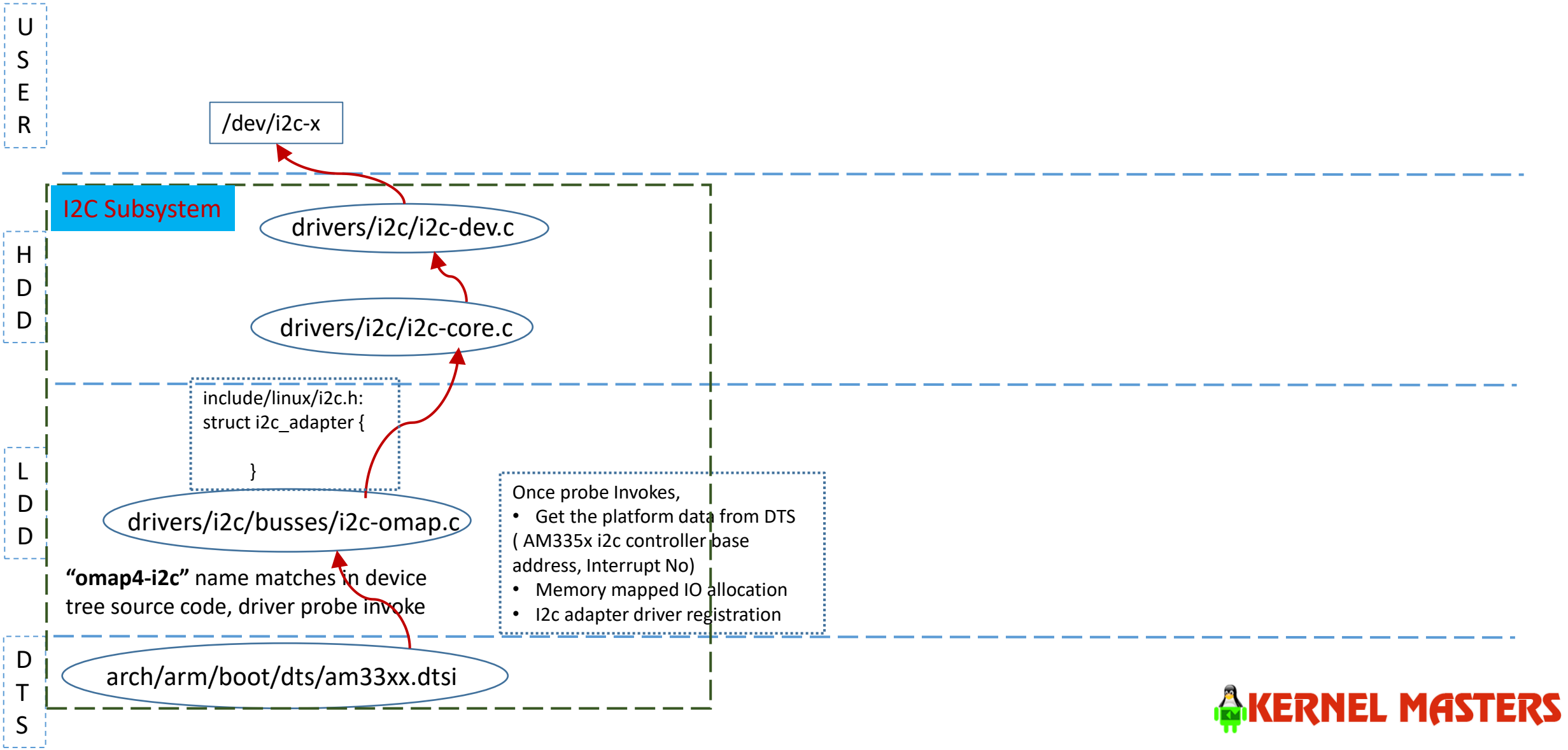


KERNEL MASTERS

I2C Framework in Kernel

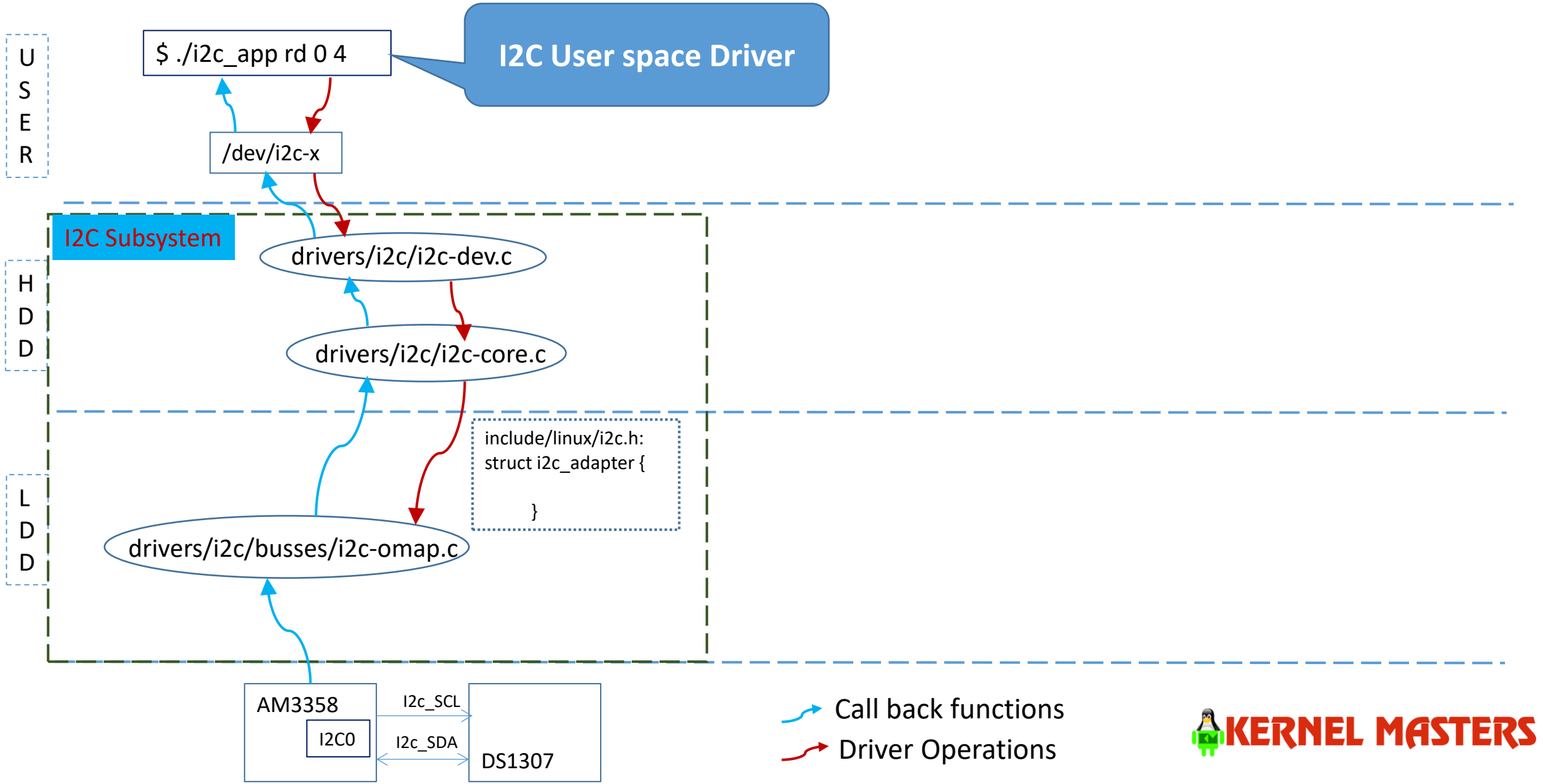
AM335X I2C Controller Basic Framework

I2C Master Initialization Framework in Kernel



KERNEL MASTERS

I2C Master Operation Framework in Kernel



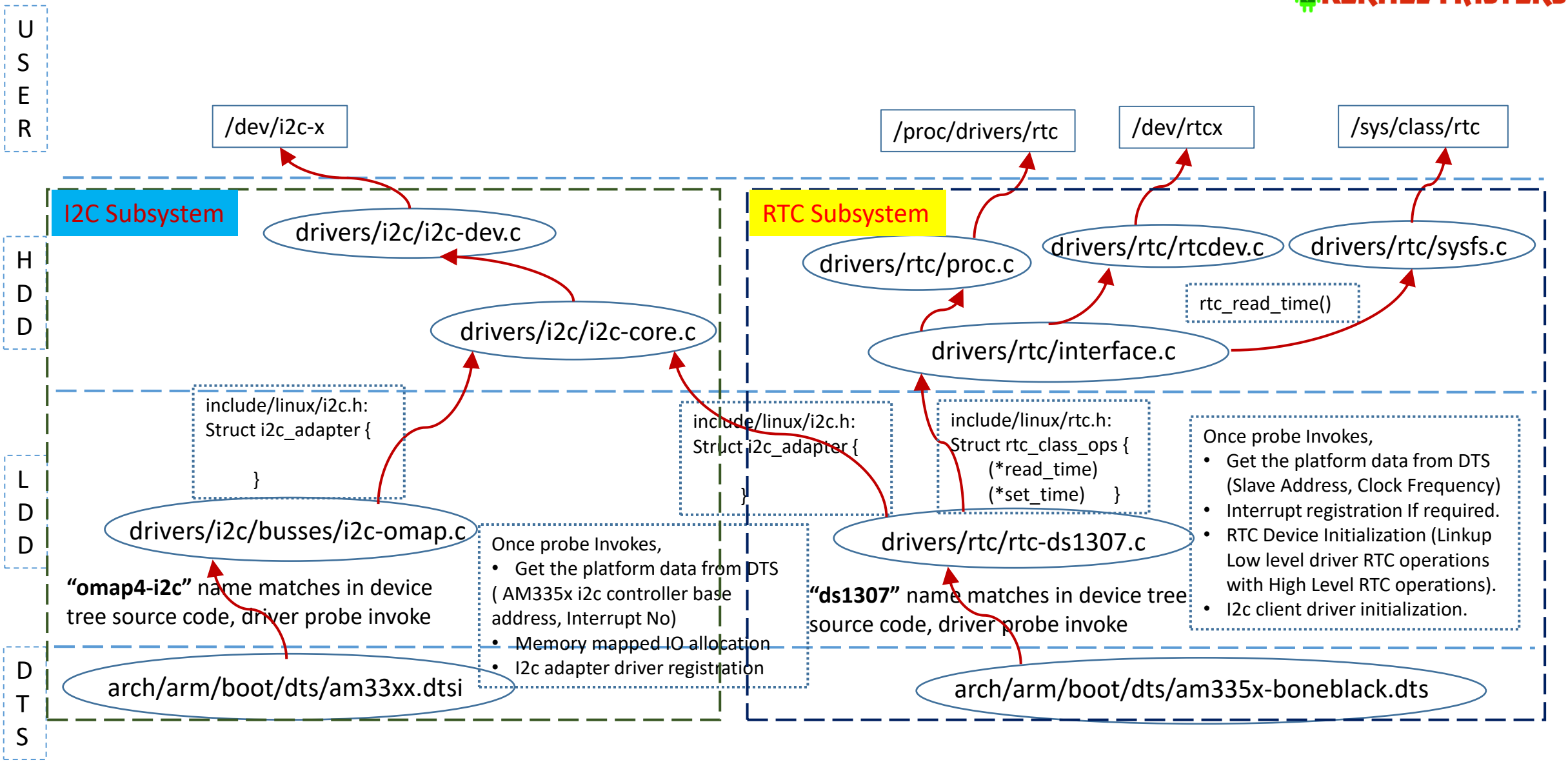
I2C Interface

DS1307 RTC Interface with AM335X I2C Controller

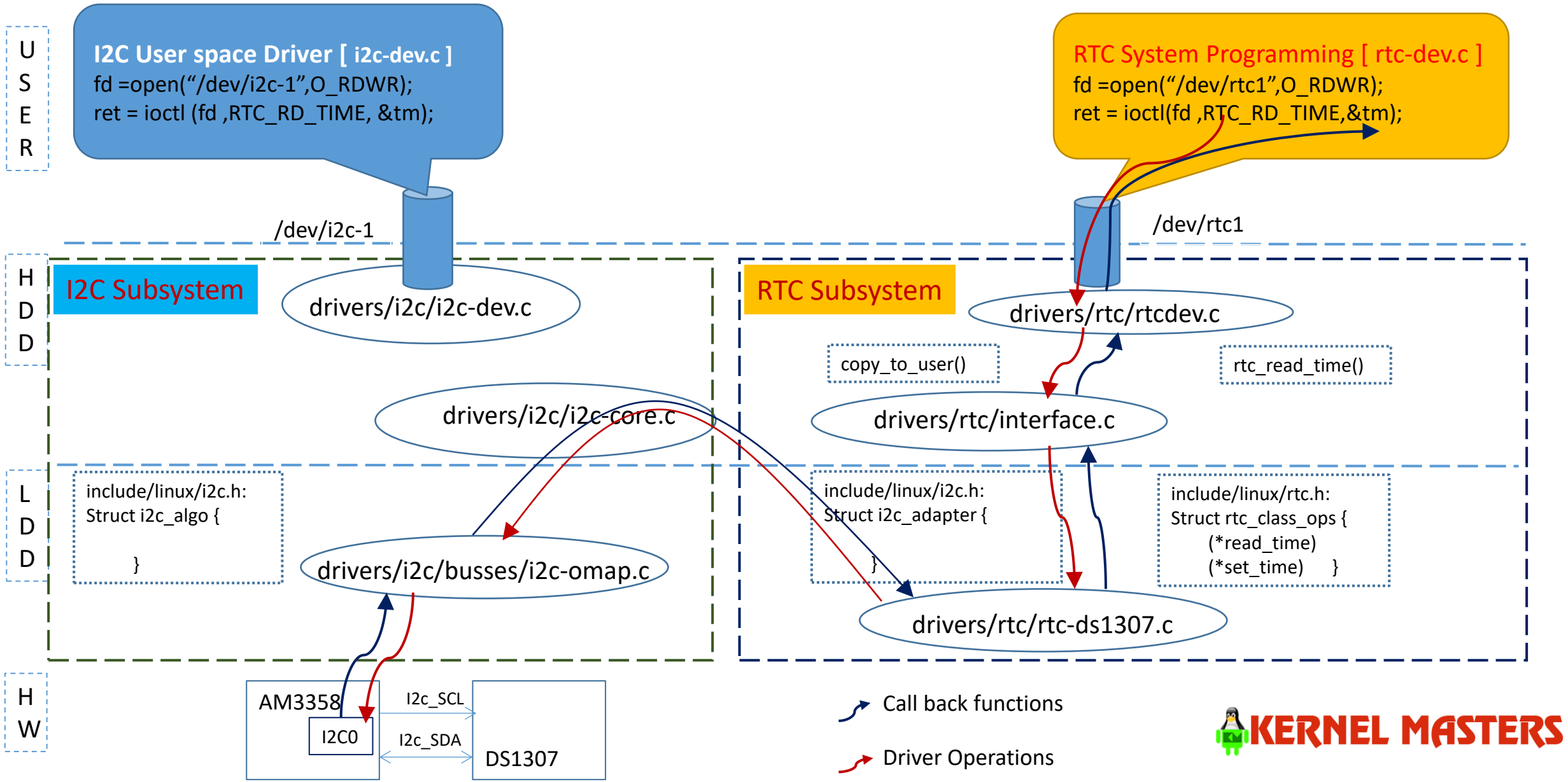
KERNEL MASTERS

I2C & RTC Initialization Framework in Kernel

KERNEL MASTERS

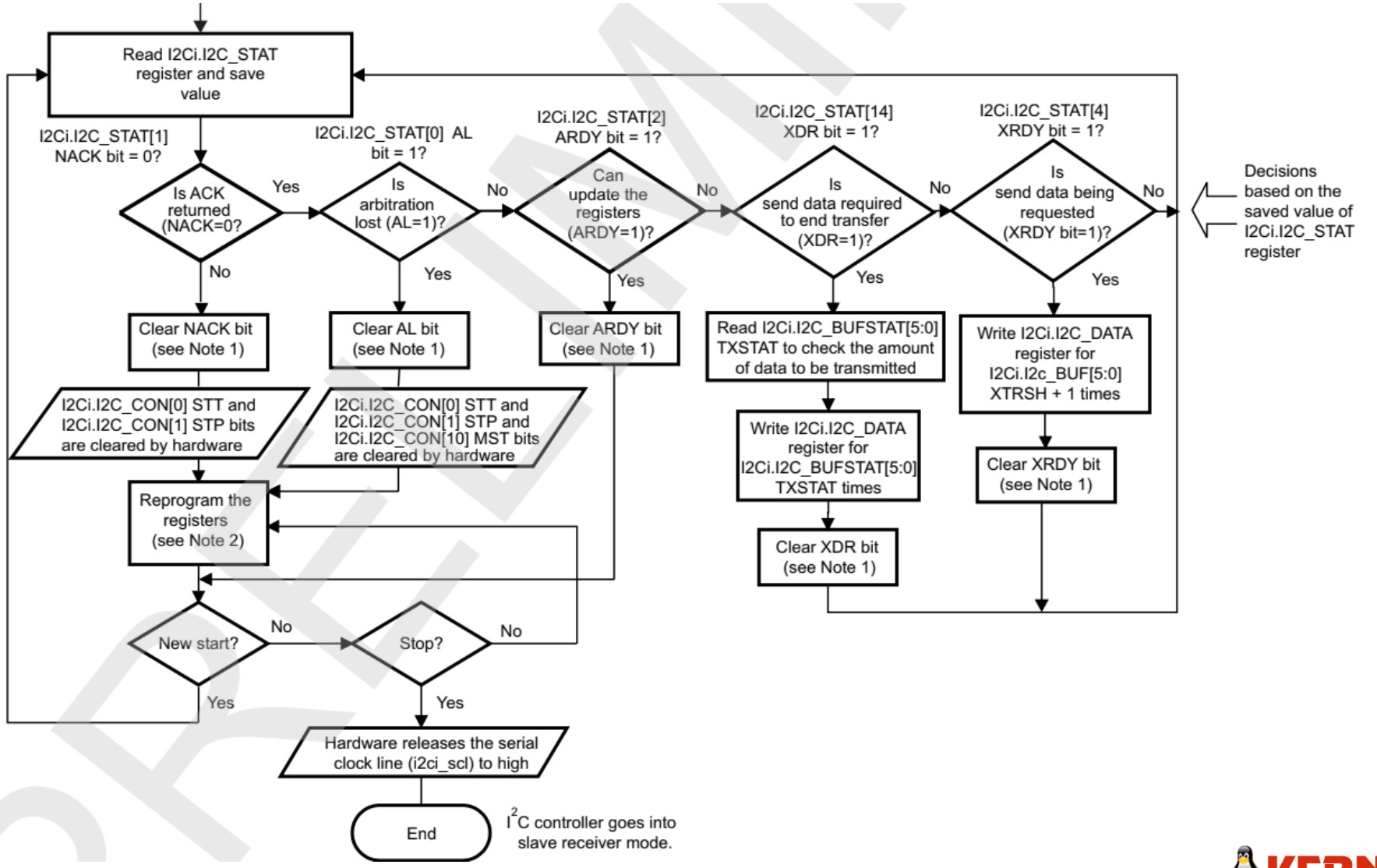


I2C & RTC Operation Framework in Kernel



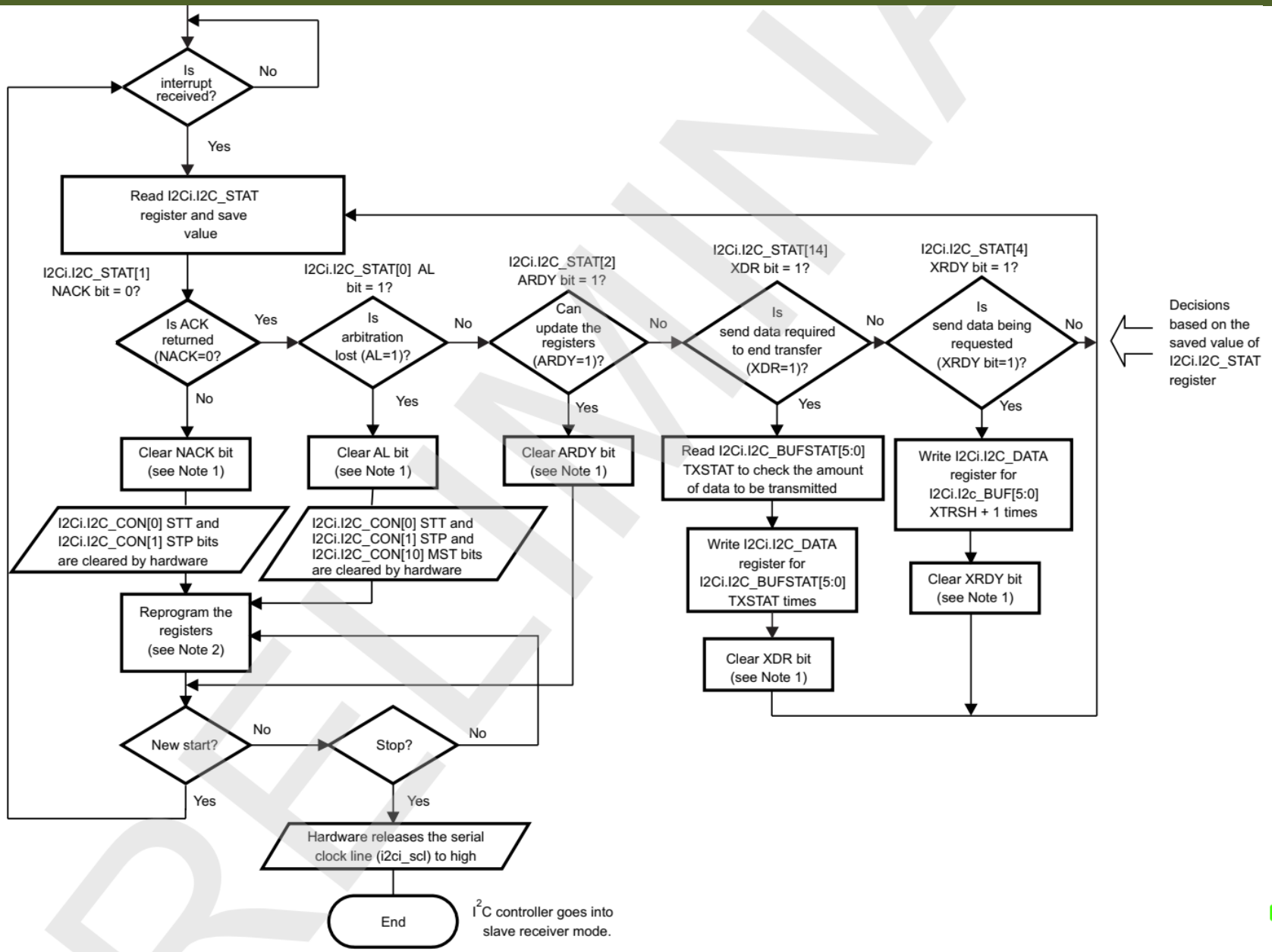
KERNEL MASTERS

I2c Master Transmit – Polling Method



KERNEL MASTERS

I2c Master Transmit – Interrupt Method



KERNEL MASTERS