

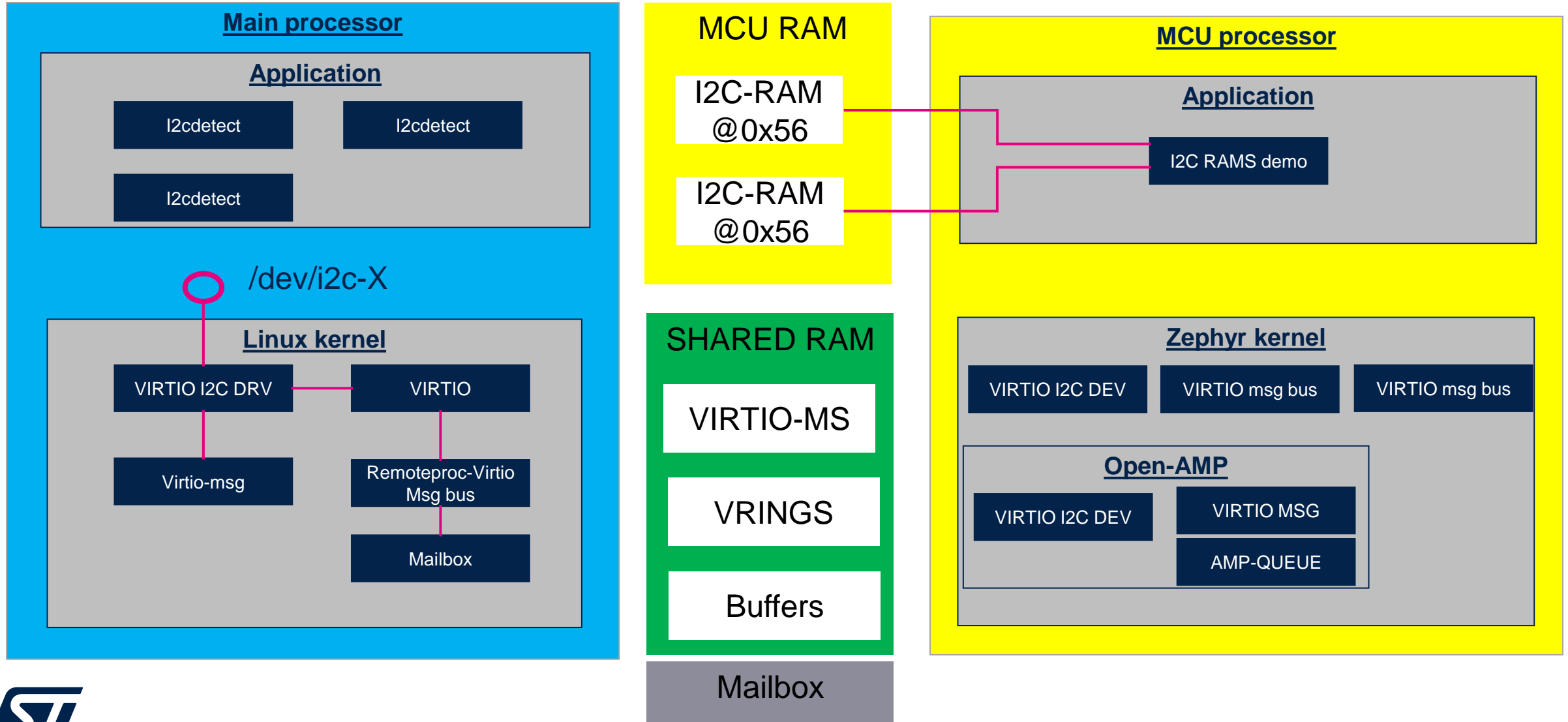


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VIRTIO-MSG ST demo

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Virtio I2C demo I2C

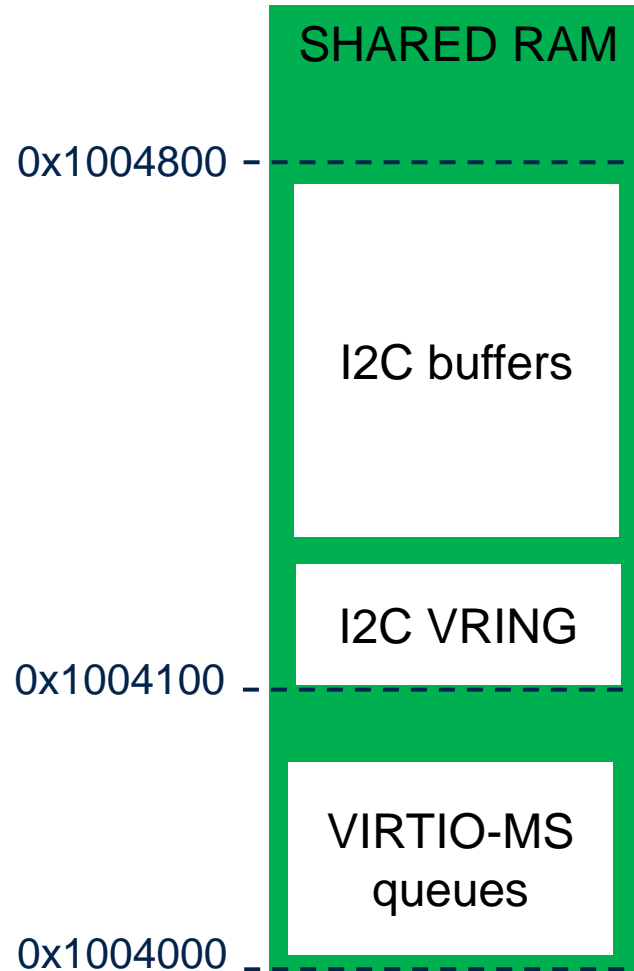


Device tree

Linux

```
reserved-memory {
    /* Virtio-msg transport bus */
    vmsgbus: vmsgbus@10040000 {
        compatible = "shared-dma-pool";
        reg = <0x10040000 0x7000>;
        no-map;
    };
    /* Vring and buffers */
    vmsgdev: vmsgbus@10041000 {
        compatible = "shared-dma-pool";
        reg = <0x10041000 0x7000>;
        no-map;
    };
};

virtio-msg-bus@0 {
    compatible = "virtio-msg,rproc" ;
    reg = <0 0>;
    mbox = <&ipcc 4>;
    memory-region = <&vmsgbus>, <&vmsgdev>;
    #address-cells = <1>;
    #size-cells = <0>;
    vdev@0 {
        reg = <0x0>;
        virtio,type = <34>; /* I2C virtio device */
    };
};
```



Zephyr

```
sram_ipc0: memory@10041000 {
    /* Vring and buffers shmem */
    #memory-region-cells = <0>;
    reg = <0x10041000 0x8000>;
};

ipc {
    #address-cells = <1>;
    #size-cells = <1>;
    ipc0: ipc@10040000 {
        reg = <0x10040000 0x100>; /* virtio-msg shmem */
        compatible = "zephyr,ipc-openamp-virtio-msg";
        memory-region = <&sram_ipc0>;
        status = "okay";
        #address-cells = <1>;
        #size-cells = <0>;
        i2c_virtio_dev0: i2c_virtio_dev@0 {
            compatible = "zephyr,virtio-i2c-dev";
            reg = <0x0>;
            device-id = <34>; /* I2C virtio device */
        };
    };
};
```



- Linux: **remoteproc-virtio-msg driver + virtio hacks**

<https://github.com/arnopo/linux/commits/virtio-msg/>

- Zephyr : **virtio-i2c device + virtio-msg remoteproc device**

https://github.com/arnopo/open-amp-zephyr/tree/virtio_msg

- Open-amp library: **virtio-i2c + virtio-msg + virtio msg bus + amp-queue**

<https://github.com/arnopo/open-amp/tree/virtio-msg>

- Openamp-system-reference: **zephyr I2C ram example**

<https://github.com/arnopo/openamp-system-reference/tree/virtio-msg>

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