

DeviceTree Booting

There is one single 32bit entry point to the kernel at `code32_start`, the decompressor (the real mode entry point goes to the same 32bit entry point once it switched into protected mode). That entry point supports one calling convention which is documented in `Documentation/x86/boot.rst`. The physical pointer to the device-tree block is passed via `setup_data` which requires at least boot protocol 2.09. The type field is defined as

```
#define SETUP_DTB 2
```

This device-tree is used as an extension to the "boot page". As such it does not parse / consider data which is already covered by the boot page. This includes memory size, reserved ranges, command line arguments or initrd address. It simply holds information which can not be retrieved otherwise like interrupt routing or a list of devices behind an I2C bus.