

* MDIO IO device

The MDIO is a bus to which the PHY devices are connected. For each device that exists on this bus, a child node should be created. See the definition of the PHY node in booting-without-of.txt for an example of how to define a PHY.

Required properties:

- reg : Offset and length of the register set for the device
- compatible : Should define the compatible device type for the mdio. Currently, this is most likely to be "fsl,gianfar-mdio"

Example:

```
mdio@24520 {
    reg = <24520 20>;
    compatible = "fsl,gianfar-mdio";

    ethernet-phy@0 {
        .....
    };
};
```

* TBI Internal MDIO bus

As of this writing, every tsec is associated with an internal TBI PHY. This PHY is accessed through the local MDIO bus. These buses are defined similarly to the mdio buses, except they are compatible with "fsl,gianfar-tbi". The TBI PHYs underneath them are similar to normal PHYs, but the reg property is considered instructive, rather than descriptive. The reg property should be chosen so it doesn't interfere with other PHYs on the bus.

* Gianfar-compatible ethernet nodes

Properties:

- device_type : Should be "network"
- model : Model of the device. Can be "TSEC", "eTSEC", or "FEC"
- compatible : Should be "gianfar"
- reg : Offset and length of the register set for the device
- local-mac-address : List of bytes representing the ethernet address of this controller
- interrupts : For FEC devices, the first interrupt is the device's interrupt. For TSEC and eTSEC devices, the first interrupt is transmit, the second is receive, and the third is error.
- phy-handle : The phandle for the PHY connected to this ethernet controller.
- fixed-link : <a b c d e> where a is emulated phy id - choose any, but unique to the all specified fixed-links, b is duplex - 0 half, 1 full, c is link speed - d#10/d#100/d#1000, d is pause - 0 no pause, 1 pause, e is asym_pause - 0 no asym_pause, 1 asym_pause.
- phy-connection-type : a string naming the controller/PHY interface type, i.e., "mii" (default), "rmii", "gmii", "rgmii", "rgmii-id", "sgmii", "tbi", or "rtbi". This property is only really needed if the connection is of type "rgmii-id", as all other connection types are detected by hardware.

tsec.txt

- fsl,magic-packet : If present, indicates that the hardware supports waking up via magic packet.
- bd-stash : If present, indicates that the hardware supports stashing buffer descriptors in the L2.
- rx-stash-len : Denotes the number of bytes of a received buffer to stash in the L2.
- rx-stash-idx : Denotes the index of the first byte from the received buffer to stash in the L2.

Example:

```
ethernet@24000 {
    device_type = "network";
    model = "TSEC";
    compatible = "gianfar";
    reg = <0x24000 0x1000>;
    local-mac-address = [ 00 E0 0C 00 73 00 ];
    interrupts = <29 2 30 2 34 2>;
    interrupt-parent = <&mpic>;
    phy-handle = <&phy0>
};
```