OTP Board Info Reading Module

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This module contains functions for reading board information (e.g. serial number, MAC address) from the OTP memory of an XCore. This information can be written to the device using the XBURN develop tool provider by XMOS.

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The ports used by OTP memory are the same on every tile. They need to be declared with the following type:

`otp_ports_t`

> Functions for reading board information (serial number, MAC address).
>
> from the OTP memory of an XCore. This information can be written to the device using XBURN. otp_ports_t structure - contains ports used to access the OTP memory.
>
> This structure has the following members:
>
> `port data`
>
> `out port addr`
>
> `out port ctrl`

For convenience the define `OTP_PORTS_INITIALIZER` is provided that can be used to initialize a structure of this type to the correct ports for accessing OTP e.g.:

```
on stdcore[0]: otp_ports_t otp_ports = OTP_PORTS_INITIALIZER;
```

The following functions can then be used to obtain information from the OTP that has be set via XBURN:

`int otp_board_info_get_mac(otp_ports_t &ports, unsigned index, char mac[6])`

> Read a MAC address from the board information written at the end of the OTP memory.
>
> This function has the following parameters:

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ports   Ports used to access the OTP memory.

index   Index of the MAC address to retrieve.

mac   Array to write the MAC address to.

This function returns:

Returns 1 on success, 0 on failure.

int otp_board_info_get_serial(otp_ports_t &ports, unsigned &value)

Read a serial number from the board information written at the end of the OTP memory.

This function has the following parameters:

ports   Ports used to access the OTP memory.

value   Variable to store the serial number to.

This function returns:

Returns 1 on success, 0 on failure.

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