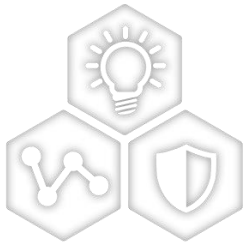


FTTM Change Summary



A Leading Provider of Smart, Connected and Secure Embedded Control Solutions



SMART | CONNECTED | SECURE

Richard Tse
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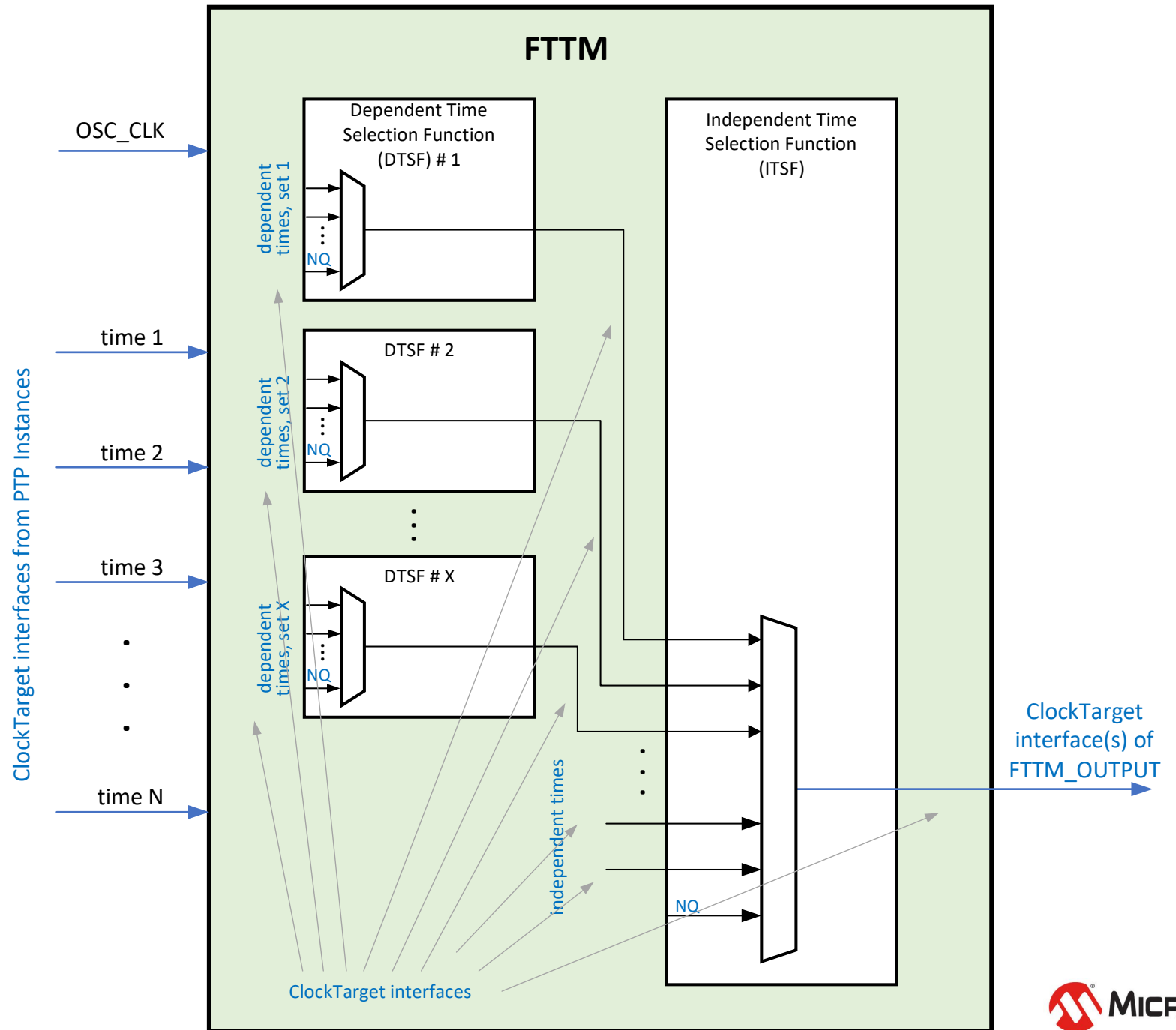
Outlook from May 2024

- **Plan to finish the following within a few weeks:**
 - Have all variables for default DTSA/ITSA described with appropriate object types in a couple of weeks
 - Do further updates based on comments received from this meeting or subsequent interactions
- **Other:**
 - Need help on YANG model
 - Do we need objects to connect FTTM inputs to DTSA/ITSA, DTSA to ITSA, and ITSA to FTTM output?
 - Management objects for this are proposed in 14.23

Major changes for FTTM since May 2024

- **Renamed some terms**
 - DTSF = dependent time selection **function** (formerly **algorithm**, DTSA)
 - ITSF = independent time selection **function** (formerly **algorithm**, ITSA)
 - MVTISA = mid-value time index selection **algorithm** (formerly **process**, MVTISP)
- **Updated list of data types (6.4.x)**
- **Added management objects (14.23)**
- **Defined all variables for MVTISA, DTSF state machine, and ITSF state machine**
- **Updated YANG Data Model**
 - Updates to existing text (17.1, 17.2, 17.3)
 - Added YANG schema tree (17.5.3)
 - Added YANG module (17.6.3)
 - Added informative configuration examples (Annex K)
- **Updated DTSF and ITSF state machine diagrams to match new management objects**

Defining FTTM input ClockTarget Interface indexes



Defining FTTM input ClockTarget Interface indexes

- **How does the user know which PTP Instance is connected to which input interface of the FTTM?**
 - Prefer to not any need knowledge of the H/W connections
 - The PTP YANG data model (RFC8575) provides a UINT32 instance-number for each PTP Instance in “the device”

```
container ptp {
  description
    "The PTP struct containing all attributes of PTP data set,
    other optional PTP attributes can be augmented as well.";
  list instance-list {
    key "instance-number";
    description
      "List of one or more PTP data sets in the device (see IEEE
      Std 1588-2008 subclause 6.3).
      Each PTP data set represents a distinct instance of
      PTP implementation in the device (i.e., distinct
      Ordinary Clock or Boundary Clock).";
  leaf instance-number {
    type uint32;
    description
      "The instance number of the current PTP instance.
      This instance number is used for management purposes
      only. This instance number does not represent the PTP
      domain number and is not used in PTP messages.";
```

Defining FTTM input ClockTarget Interface indexes

- Make use of UIN32 instance numbers that are associated with different PTP Instances in the PTP YANG data model
- Defined a mapping object (fttmPtpInstanceToIndexMap) between each PTP Instance's instance-number and a FTTM input index number:
 - The fttmPtpInstanceToIndexMap object is a vector of size fttmNumActiveTimeIndexes
 - Each vector member contains the following two items:
 - The instance-number of the PTP Instance that is associated to the input ClockTarget interface of the FTTM.
 - The assigned index number for the input ClockTarget interface of the FTTM.

Connecting FTTM index numbers to ITSF or DTSF

- Defined a mapping object (fttmIndexToDtsfItsMap) for each FTTM input index number to either:
 - input index number of a particular DTSF
 - input index number of the ITSF
- Defined a mapping object (fttmDtsfToItsMap) for each DTSF output ClockTarget Interface to a ITSF input index number



Thank You