E1/T1 Hardware Interface (including icE1usb) - Bug #4750

populate new osmo-e1-hardware.git with gateware + firmware

09/11/2020 01:22 PM - laforge

Status:	Resolved	**Start date:**	09/11/2020
Priority:	Normal	**Due date:**	
Assignee:	tnt	**% Done:**	0%
Category:			
Target version:			
Spec Reference:			

Description

We have a new repository where we want to keep a (cleaned up) version of the gateware + firmware for the ice40 E1 interface and the e1-tracer.

Related issues:

Related to E1/T1 Hardware Interface (including icE1usb) - Feature #4674: make...	**Resolved**	**07/21/2020**
Blocks E1/T1 Hardware Interface (including icE1usb) - Feature #4675: Add + do...	**In Progress**	**07/21/2020**
Blocks E1/T1 Hardware Interface (including icE1usb) - Feature #4673: expose t...	**New**	**07/21/2020**
Blocks E1/T1 Hardware Interface (including icE1usb) - Feature #4672: firmware...	**New**	**07/21/2020**
Blocks E1/T1 Hardware Interface (including icE1usb) - Feature #4676: Reset wh...	**Resolved**	**07/21/2020**

History

#1 - 09/11/2020 01:23 PM - laforge

- Blocks Feature #4675: Add + document vendor specific control commands added

#2 - 09/11/2020 01:23 PM - laforge

- Related to Feature #4674: make use of USB ISO transfer header added

#3 - 09/11/2020 01:24 PM - laforge

- Blocks Feature #4673: expose the GPS UART as CDC device added

#4 - 09/11/2020 01:24 PM - laforge

- Blocks Feature #4672: firmware support for the GPSDO function added

#5 - 09/11/2020 01:24 PM - laforge

- Blocks Feature #4676: Reset when USB altsetting is reset to 0 added

#6 - 09/11/2020 03:33 PM - tnt

- Status changed from New to In Progress

hardware

I need to sort out the kicad library situation since ATM it links to stuff on my hdd which obviously won't work for anyone else.
Given the hw is being manufactured right now (so can't make change anyway), this is a rather low priority ATM.

gateware

I'm busy doing that right now.
It's about 80% done. All the stuff that's common (or mostly common) to all the boards is done and that already builds a SoC that builds. That also include the E1 peripheral themselves.

What's remaining is mostly in the stuff that's completely specific to each board, things like the tick counters / the gpsdo hardware / some gpios / ....

firmware

I will only do the bare minimum for it to build before pushing meaning there will be lots of duplication at first between e1-recorder and the icE1usb code, so I will only:

- update build system / link script for the new address space layout

- use the usb stack code from the `cores/no2usb` submodule rather than repeating it.
- update various IO addresses that have changed during the cleanup

I'll push gateware / software of that once I have a version that at least boots and enumerates for each of the boards.

#7 - 09/15/2020 08:22 PM - tnt

- Status changed from In Progress to Resolved

It's all there.

(Doesn't mean it's all done and finished, but ... that's all I have for now :p)