

PHY Configuration

RF Channel Definition

PHY-0Link Spectrum Ad Hoc

Ed Boyd

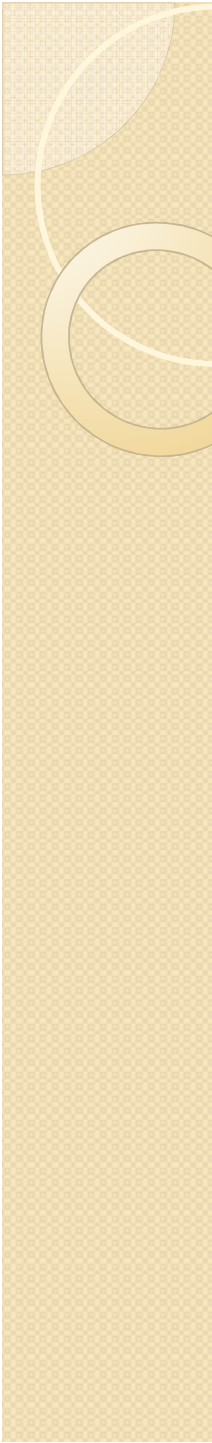
Duane Remein

Configuring the RF Channel

- At the CLT
 - Both US and DS RF Channel(s) parameters are configured via MDIO
 - Center Frequency
 - High/Low/Mid Exclusion Bands [EB17](#)
 - US PHY-Link location & width [EB18](#) [D6](#)
- At the CNU
 - Discovered via correlation [EB23](#)
 - DS Center Frequency of Primary RF Channel [EB19](#)
 - DS PHY-Link (width is defined by standard?) [EB27](#)
 - Configured via Primary PHY-Link [EB24](#)
 - DS High/Low/Mid Exclusion Bands
 - DS Center Frequency of any Secondary RF Channels [EB25](#)
 - US Center Frequency
 - US High/Low/Mid Exclusion Bands
 - US PHY-Link location & width [EB26](#)

Slide 19

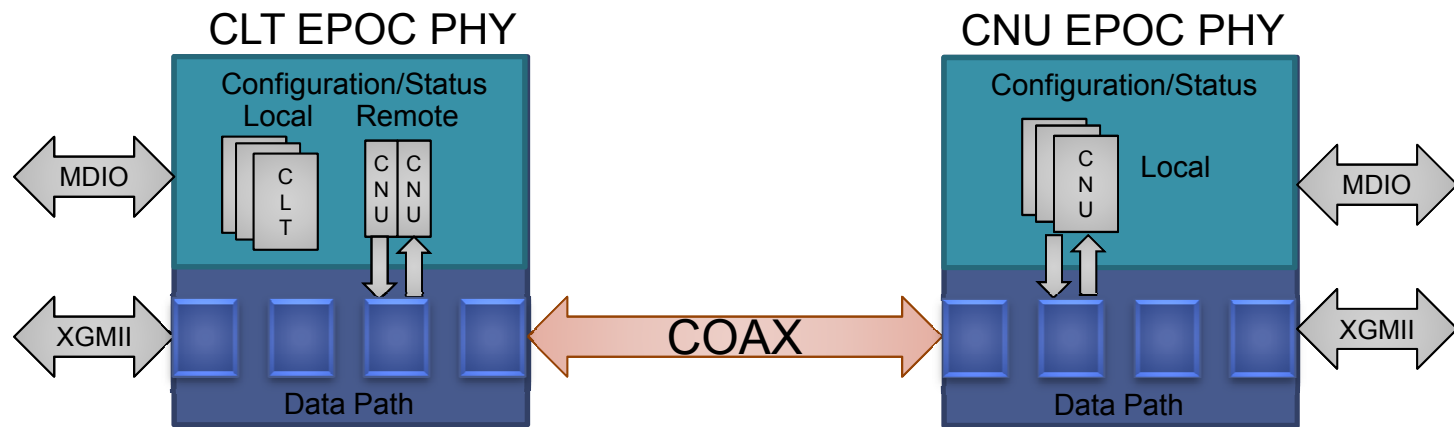
- EB17** Exclusion Band Start Carrier Number and Count
Edward Boyd, 1/30/2013
- EB18** Downstream PHY Link Location is needed as well.
Edward Boyd, 1/30/2013
- EB19** The PHY Link Channel should configure this parameter.
Edward Boyd, 1/30/2013
- EB23** This is a hunting procedure.
Edward Boyd, 1/30/2013
- EB24** What is primary. I would say remotely configured via PHY Link Channel.
Edward Boyd, 1/30/2013
- EB25** DS Frequency of all RF Channels
Edward Boyd, 1/30/2013
- EB26** I'm not sure about width. US PHY Link Channel Definition
Edward Boyd, 1/30/2013
- EB27** I think that it will be a fixed width but we haven't passed a motion on it yet.
Edward Boyd, 1/30/2013
- D6** I think the DS PHY-Link (at least in the primary RF channel should be defined by standard or discovered. I agree that it wouldn't hurt to reinforce it via configuration.
D00725987, 2/5/2013



Options

- Any CNU PHY register that can be read/set via MDIO can be:
 - read at the CLT via the PHY-Link
 - set by the CLT via the PHY-Link
- Any CNU PHY register that can be read/set at/by the CLT via the PHY-Link can be read/set via MDIO
 - Can limit the registers set via PHY-Link

Configuring the EPoC PHY(s)



- At the CLT
 - MDIO provides access to CLT PHY registers for configuration and status.
 - MDIO provides access to remote CNU PHY registers for configuration and status via the PHY Link Channel (with echo). D2
- At the CNU
 - MDIO provides access to CNU PHY registers for configuration and status.
 - PHY Link Channel provides CLT remote access to CNU PHY registers for configuration and status.
 - For simplicity, all CNU register pages could be accessible by both methods.
 - CNU does not have remote access to CLT PHY registers. D3

Slide 21

- D2** I don't think Echo is the right term here. Reading back a register is not an Echo (unless your propossing the in order to read a register the CLT must write it, which I doubt).
D00725987, 2/5/2013
- D3** This may be obvious but it doesn't hurt to be explicit.
D00725987, 2/5/2013
- D7** Moved to location of origional slide on this topic.
D00725987, 2/5/2013

PHY-Link register

Straw Poll #10

- I think that the read/write capability of all/nearly all CNU PHY registers should be the same between the PHY-Link (from CLT) and MDIO (from CNU)

Yes ___ 4 ___

No, some ___

No, None ___ 1 ___

Abstain ___ 3 ___