Answers for questions(1-2-3) from discussion

Thursday, December 15, 2022   5:30 PM

Q1. Check if linkup in current scenario

This is where AM437x-EVM is connected
Connected
Removed

Status when I manually connect and disconnect wire
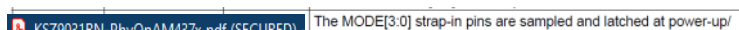

Not connected

When I connect wire

Q2. Check if board pings when it boots up on linux

```
siva-test@sivatest-OptiPlex-3020:~$ ping 169.254.1.25
PING 169.254.1.25 (169.254.1.25) 56(84) bytes of data.
64 bytes from 169.254.1.25: icmp_seq=1 ttl=64 time=0.426 ms
64 bytes from 169.254.1.25: icmp_seq=2 ttl=64 time=0.514 ms
64 bytes from 169.254.1.25: icmp_seq=3 ttl=64 time=0.379 ms
64 bytes from 169.254.1.25: icmp_seq=4 ttl=64 time=0.474 ms
64 bytes from 169.254.1.25: icmp_seq=5 ttl=64 time=0.439 ms
64 bytes from 169.254.1.25: icmp_seq=6 ttl=64 time=0.470 ms
64 bytes from 169.254.1.25: icmp_seq=7 ttl=64 time=0.476 ms
64 bytes from 169.254.1.25: icmp_seq=8 ttl=64 time=0.475 ms

root@am437x-lrd:~#
root@am437x-lrd:~#
root@am437x-lrd:~# dhclient eth0
root@am437x-lrd:~# ifconfig
eth0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500  metric 1
        inet 169.254.1.25  netmask 255.255.255.0  broadcast 169.254.1.255
        inet6 fe80::6a9e:19ff:feb8:3c28  prefixlen 64  scopeid 0x20<link>
        ether 68:9e:19:b8:3c:28  txqueuelen 1000  (Ethernet)
        RX packets 17  bytes 2297 (2.2 KiB)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 84  bytes 15148 (14.7 KiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0
```

TEST DONE TO ACERTAIN IF PHY WORKS
WE WERE ABLE TO PING FROM PC TO TARGET BY SETTING STATIC IP ON NTARGET

Q3. Check data sheet and see what it means when we pull down ETH1_RXD0

KS79031RN-PhyOnAM437x.pdf (SECURED) - | The MODE[3:0] strap-in pins are sampled and latched at power-up/

Scratch Page 1

Q3. Check data sheet and see what it means when we pull down ETH1_RXD0

KSZ9031RN-PhyOnAM437x.pdf (SECURED)	The MODE[3:0] strap-in pins are sampled and latched at power-up/ reset and are defined as follows:		

				MODE[3:0]	Mode
				0000	Reserved - not used
				0001	Reserved - not used
				0010	Reserved - not used
				0011	Reserved - not used
				0100	NAND tree mode
				0101	Reserved - not used
				0110	Reserved - not used
27	MODE3	I/O		0111	Chip power-down mode
28	MODE2	I/O		1000	Reserved - not used
31	MODE1	I/O		1001	Reserved - not used
32	MODE0	I/O		1010	Reserved - not used
				1011	Reserved - not used
				1100	RGMII mode - Advertise 1000BASE-T full-duplex only
				1101	RGMII mode - Advertise 1000BASE-T full- and half-duplex only
				1110	RGMII mode - Advertise all capabilities (10/100/1000 speed half-/full-duplex), except 1000BASE-T half-duplex
				1111	RGMII mode - Advertise all capabilities (10/100/1000 speed half-/full-duplex)

27-RXD3	28-RXD2	31-RXD1	32-RXD0
MODE3	MODE2	MODE1	MODE0
1	1	1	0
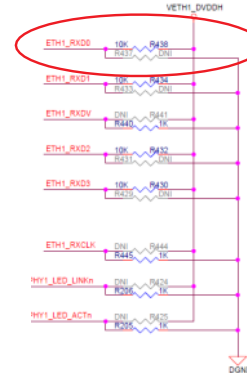
R437 persist and R438 is removed