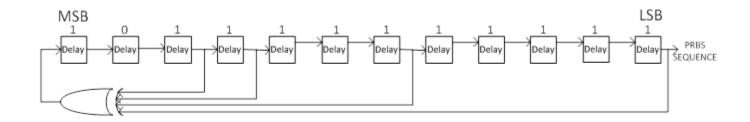
## Upstream Probe Sequence for 802.3bn

Leo Montreuil, Broadcom

## Upstream Probe Sequence (1 of 2)

- DOCSIS 3.1, section 7.4.16.3:
  - PRBS sequence  $X^{12} + X^9 + X^8 + X^5 + 1$
  - Seed = 3071 d
- Recommend for 802.3bn (section 102.4.3.3):
  - Use the D3.1 sequence, seed and framing
  - 2 symbols (repeat symbol twice) using all nonexcluded subcarriers
  - Seed = BFF h
  - Should we support skipping/staggering probe pattern?
    - No. There is no advantage at using staggered probe in EPoC.

## Upstream Probe Sequence (2 of 2)



Sequence of length 4096 is:

Sequence is mapped to BPSK:

```
0 mapped to a BPSK pilot of +1 1 mapped to a BPSK pilot of -1
```

## **Proposed Motion**

Move to adopt the Upstream Probe Sequence recommendation on pages 2 and 3 of montreuil\_3bn\_02\_0514.pdf without staggering. Update the draft via the next comment round.

Moved:

Seconded: