

D1.0 Precoding Figure modifications

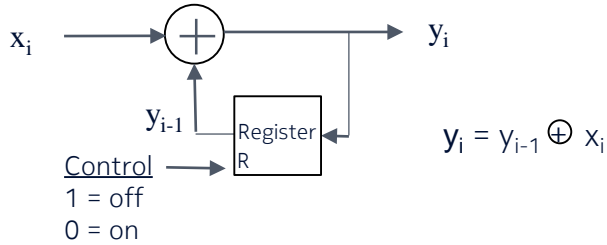
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IEEE P802.3ca 100G-EPON Task Force Meeting, Pittsburgh, PA May, 2018

Precoding Figures in D1.0 & ambiguities

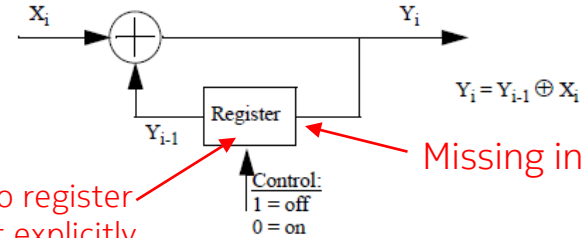
Powell_3ca_1_0318

Encoder



802.3ca_D1.0

X_i = Input from OLT PCS FEC encoder
 Y_i = Output to OLT PCS gearbox

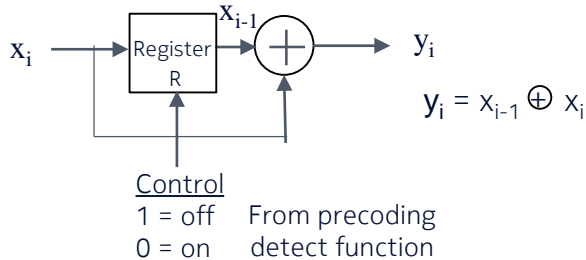


No "R" on Reg. so register output state not explicitly linked to control

Missing input arrow

Figure 142-7—Differential encoding

Decoder



X_i = Input from ONU PMA
 Y_i = Output to ONU PCS Synchronizer

Control:
1 = off
0 = on

From precoding detect function

No "R" on Reg. so register output state not explicitly linked to control

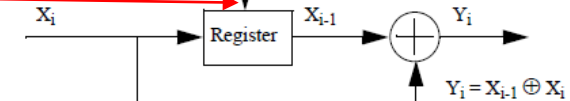


Figure 142-8—Differential decoding

- Ambiguities exist in the current D1.0 PMA precoding figures

Proposed PMA precoding figure modifications

A

X_i = Input from OLT PCS FEC encoder
 Y_i = Output to OLT **PCS gearbox**
PMA?

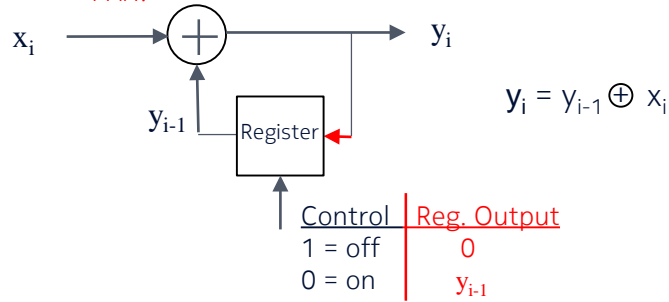


Figure 142-7 - Differential encoding

B

X_i = Input from ONU PMA
 Y_i = Output to ONU PCS Synchronizer

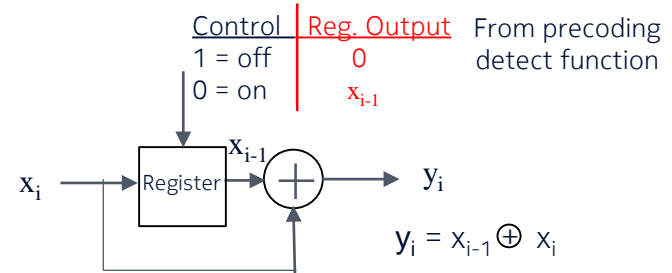


Figure 142-8 - Differential decoding

- Proposed figure modifications shown in Red clarify the ambiguities

NOKIA