

Introduction

❖ Topic

- Development of SerDes IP based on 65nm CMOS

❖ Team member

- Team member: K.C Choi, C.K Seong, Y.S Park and W.S Kim
 - CDR (Clock and Data Recovery) part: K.C Choi
 - PLL (Phase-Locked Loops) part: Y.S Park
 - Equalizer part: C.K Seong and W.S Kim

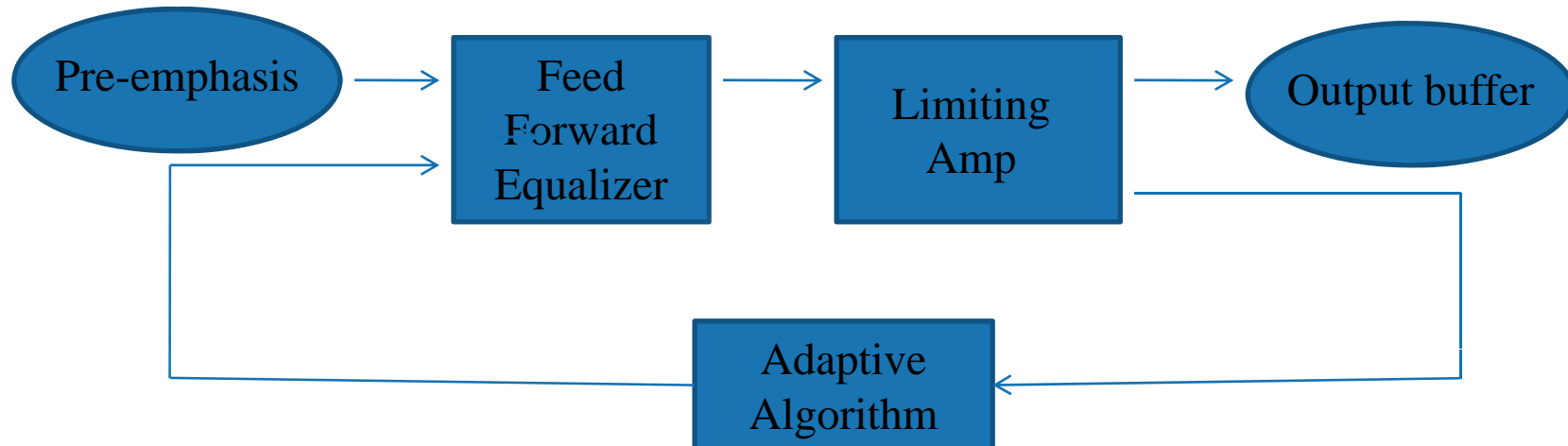
❖ Sponsor

- Samsung Electronics

Adaptive Feed-Forward Equalizer

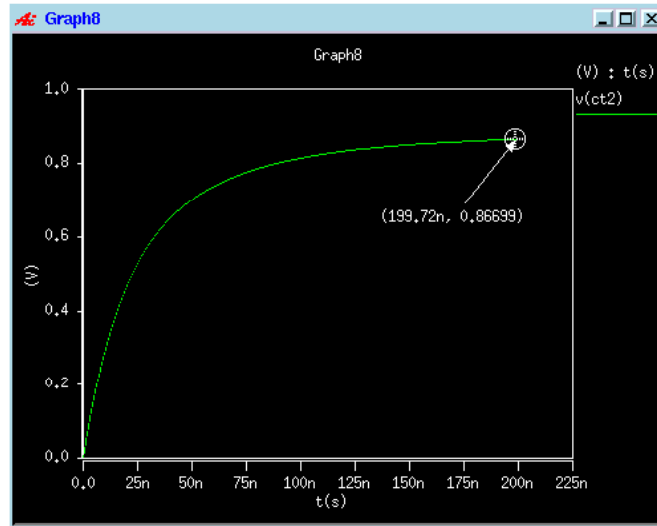
❖ 2.7Gb/s Adaptive Feed forward Equalizer

❖ Basic Structure

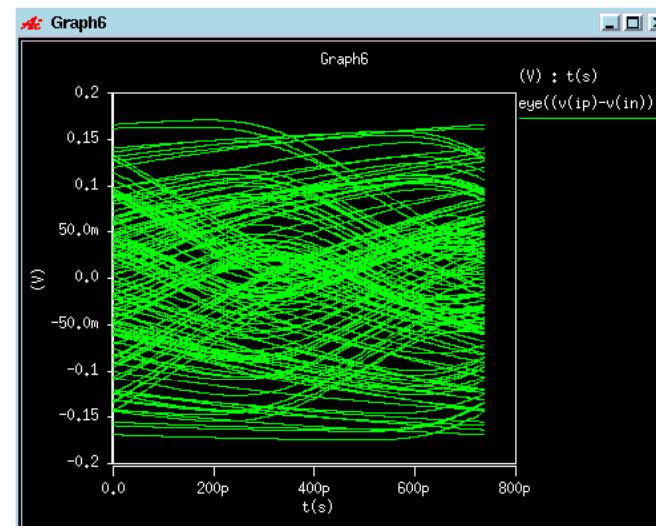


Adaptive Equalizer

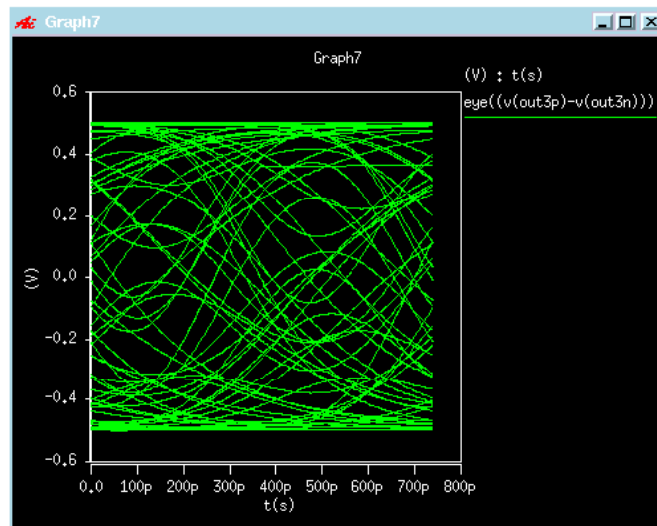
❖ Eye diagram



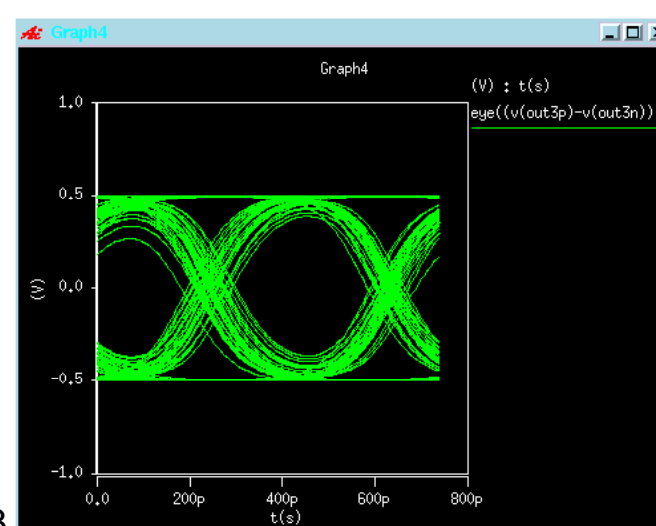
VGA
coefficient
adaptation



Channel
passing
signal



Equalizer
adaptation
start



Equalizer
adaptation
end