

# 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

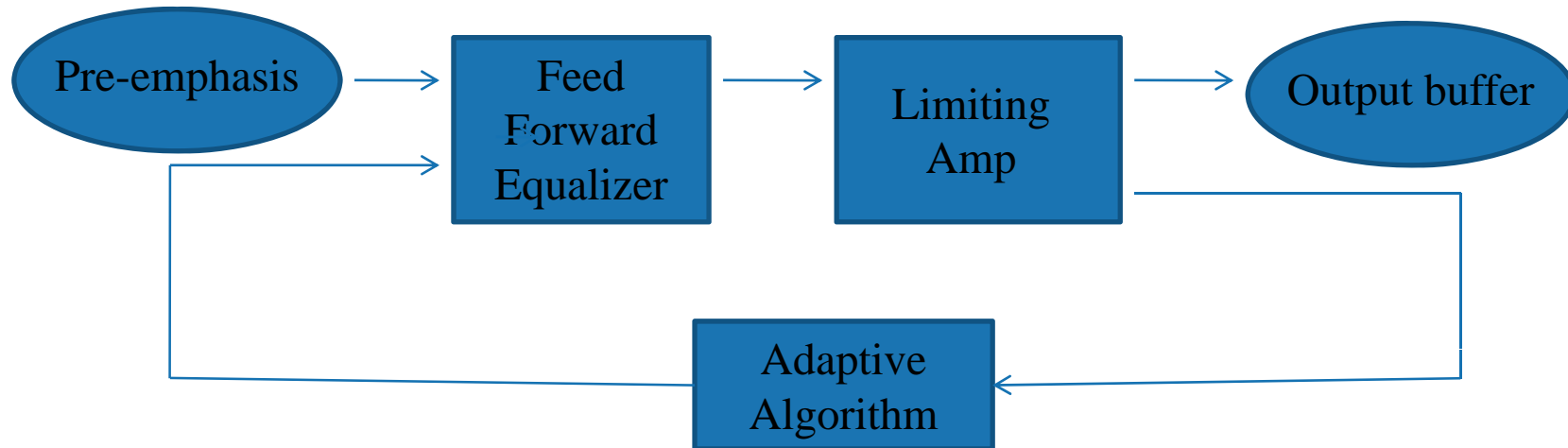
## ❖ Sponsor

- Samsung Electronics

# Adaptive Feed-Forward Equalizer

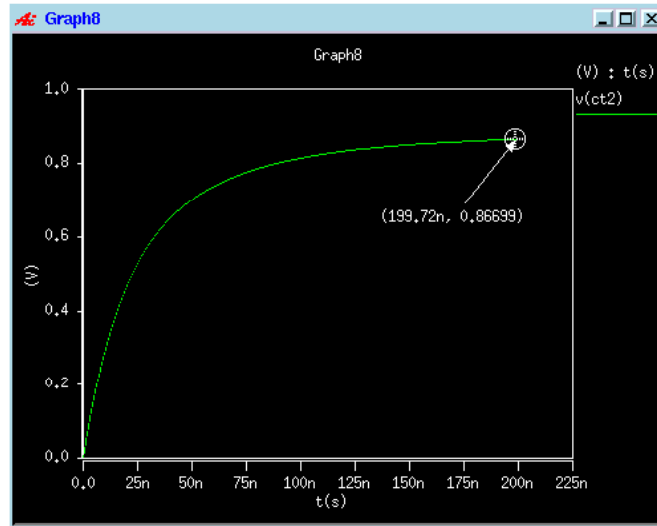
## ❖ 2.7Gb/s Adaptive Feed forward Equalizer

### ❖ Basic Structure

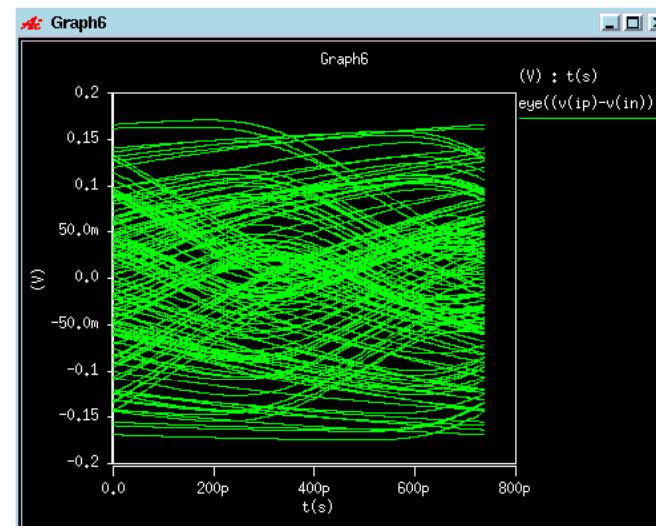


# Adaptive Equalizer

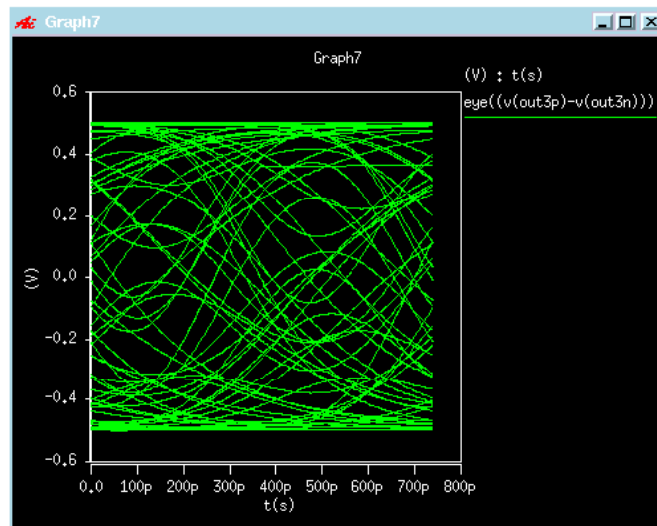
## ❖ Eye diagram



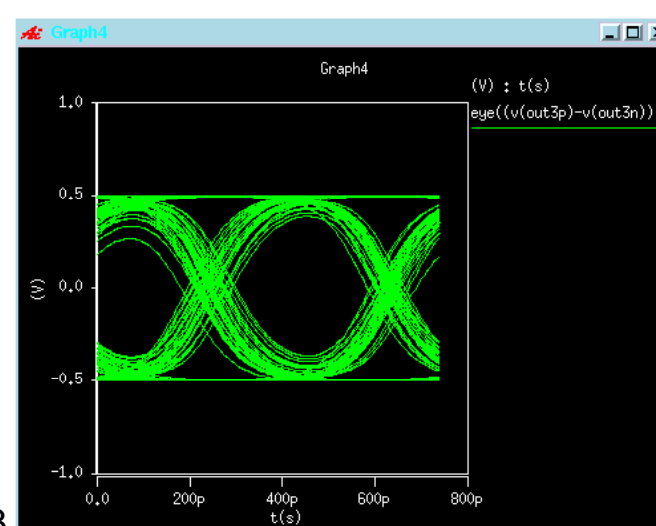
VGA coefficient adaptation



Channel passing signal



Equalizer adaptation start



Equalizer adaptation end