LIST OF SYMBOLS

C_k = Spreading

C_t = output conventional differential modulation calculation

D_t = Output Symbol Detection

E_t = Output of Unitary Matrix Decoder in specific time (2x2 MIMO)

$E_{t,m}$ = Output of Unitary Matrix Decoder specific time and antenna (2x2 MIMO)

$e_{t,m,k}$ = Output of Unitary Matrix Decoder in specific time, antenna, and subcarrier (2x2 MIMO)

f =frequency carrier

F_t = Output of Unitary Decoder in specific time (4x4 MIMO)

$F_{t,m}$ = Output of Unitary Matrix Decoder specific time and antenna (4x4 MIMO)

$f_{t,m,k}$ = Output of Unitary Matrix Decoder in specific time, antenna, and subcarrier (4x4 MIMO)

G_t = Output DUSTM calculation

H_t = Channel Coefficient Matrix

$\Im$ = Imaginary part of symbol

k = subcarrier number

m = antenna number

N_{fft} = number of subcarriers

N_{par} = number of parralel data entering MC-CDMA modulator

N_{sg} = number of spreading gain

N_t = Noise coefficient Matrix

R_t = Received Signal Matrix

$r_{t,m}$ = Received Signal Matrix in specific time and antenna

S_t = STFC Matrix

$S_{t,m}$ = Column Matrix of PSK mapper output

$s_{t,m,k}$ = Output of PSK mapper

$\hat{s}_{t,m,k}$ = received symbol (output maximum likelihood decoder)

t = time

Tc = coherent time

Ts = symbol time

Tx = transmitter

Rx = receiver

$\Re$ = real part of symbol

X_t = Output of Differential STFC calculation

$X_{t,m}$ = Output of Differential STFC calculation in specific time and antenna

$Y_{t,m,k}$ = The weighting matrix of the real component STFC

$Z_{t,m,k}$ = The weighting matrix of the imaginer component STFC