FIGURE CAPTIONS

Chapter 2

Table 2-1 Typical results of proposed accuracy improvement procedure for $4\times0.24\times32\mu m^2$ SiGe at V_{BE}=0.82 V, V_{CE}=3 V, I_B=9.136 μA, and I_C=1.516 mA. The initial value of $R_{bi}|_L$, $R_{bi}|_H$, C_{bci}, and C_{bcx} are 14.85 Ω, 17.31 Ω, 4.7897 fF, and 15.7303 fF, respectively. The extracted value of $R_{bi}C_{bci}$, C_π and $C_{bci}+C_{bcx}$ are 82.91fsec, 410.31fF and 20.52fF, respectively.

Chapter 4

Table 4-1 Bias at V_{BE}=0.83V, V_{CE}=3V (a) Extrinsic and substrate parameters extracted (b) Intrinsic parameters extracted with emitter length variation

Table 4-2 Bias at V_{BE}=0.83V, V_{CE}=3V (a) Extrinsic and substrate parameters extracted (b) Intrinsic parameters extracted with emitter width variation

Table 4-3 Bias at V_{BE}=0.83V, V_{CE}=3V (a) Extrinsic and substrate parameters extracted (b) Intrinsic parameters extracted with emitter finger number variation

Table 4-4 Bias at V_{BE}=0.83V, V_{CE}=3V (a) Extrinsic and substrate parameters extracted (b) Intrinsic parameters extracted with cell number variation