Appendix C

Time dependent coefficients are evaluated from following differential equations

$$\dot{A}_1 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_1 = 0$$

$$\dot{A}_2 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_2 + iJB_1 = 0$$

$$\dot{A}_3 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_3 + 2iUA_1 = 0$$

$$\dot{A}_4 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_4 + iJB_2 = 0$$

$$\dot{A}_5 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_5 + 2iJA_2^*A_1^2 = 0$$

$$\dot{A}_6 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_6 + 4iUB_2 = 0$$

$$\dot{A}_7 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_7 + 2iUA_3 = 0$$

$$\dot{A}_8 + i\left(\omega_{a_1} - \frac{ik_1}{2}\right)A_8 + 4iUA_3 + 2iUA_3^*A_1^2 = 0$$

$$\dot{B}_1 + i\left(\omega_{a_2} - \frac{ik_2}{2}\right)B_1 = 0$$

$$\dot{B}_2 + i\left(\omega_{a_2} - \frac{ik_2}{2}\right)B_2 + iJA_1 = 0$$

$$\dot{B}_3 + i\left(\omega_{a_2} - \frac{ik_2}{2}\right)B_3 + iJA_2 = 0$$

$$\dot{B}_4 + i\left(\omega_{a_2} - \frac{ik_2}{2}\right)B_4 + iJA_3 = 0$$