

$$\Delta E = -e * \left( \text{VOLT} + \text{DVOLT} + \text{V1} \, x + \frac{\text{V20} \, x^2 + \text{V02} \, y^2}{2} + \text{V11} \, xy \right) \\ \times \sin(2\pi \, \text{FREQ}(t - t_s) + \text{PHI} + \text{DPHI}),$$