

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