Tutorial - 11

Q.1. There is an electronic chip board. which requires a finned heat exchanger with effectiveness of of atleast 3, to avoid overheating. Design fins as per given crossection area and length (basically you need to calculate, no. of fins required in given design).

Air
$(h = 20 \frac{W}{m^2 K})$

$T_b = 25°C$.

A(2mm × 2mm), 4cm long fin, $K = 237 \frac{W}{mk}$.