$$\textbf{A.}$$
 .
$$T_{life\,time} = 128 \times 10^{15} bytes \times \frac{1sec}{470,000,000bytes} \times \frac{1min}{60secs} \times \frac{1hour}{60mins} \times \frac{1day}{24hours} \times \frac{1year}{365years} = 8.64 years$$

$$\begin{array}{l} T_{life\,time} = 128 \times 10^{15} bytes \times \frac{1sec}{303,000,000bytes} \times \frac{1min}{60secs} \times \frac{1hour}{60mins} \times \frac{1day}{24hours} \times \\ \frac{1year}{365years} = 13.40 years \end{array}$$

$$T_{life\,time} = 128 \times 10^{15} bytes \times \frac{1 day}{20,000,000,000,000bytes} \times \frac{1 year}{365 days} = 17534.25 years$$