$$T(n) = \begin{cases} \Theta(1), & se\ n=1 \\ 2T(n/2) + \Theta(n), & se\ n>1 \end{cases}$$

$$T(n) = 2T\left(\frac{n}{2}\right) + \Theta(n)$$

$$T(n) = 2\left(2T\left(\frac{n}{4}\right) + \Theta\left(\frac{n}{2}\right)\right) + \Theta(n)$$

$$T(n) = 2\left(2\left(2T\left(\frac{n}{8}\right) + \Theta\left(\frac{n}{4}\right)\right) + \Theta\left(\frac{n}{2}\right)\right) + \Theta(n)$$

$$= 2^3 T\left(\frac{n}{8}\right) + 4\cdot\Theta\left(\frac{n}{4}\right) + 2\,\Theta\left(\frac{n}{2}\right) + \Theta(n)$$

$$= 2^3 T\left(\frac{n}{2^3}\right) + n + n + n$$

$$\Rightarrow T(i) = 2^i\, T\left(\frac{n}{2^i}\right) + i\,n \cdot$$

Se $T(1) = \Theta(1)$,

$$\frac{n}{2^i} = 1 \Rightarrow \boxed{\log_2^n = i}$$

$$= 2^{\log_2^n} T(1) + \log_2^n n \Rightarrow n + \log n \cdot n = \boxed{\Theta(\log_2^n \cdot n)}$$