Definitions:

$$\begin{aligned} A000217\left(n\right) &= \frac{1}{2}n\left(n+1\right) \\ A224924\left(n\right) &= \sum_{j=0}^{n}\sum_{k=0}^{n} bitand\left(j,k\right) \end{aligned} \tag{1}$$

Possible Simplification (treating $\sum$ symbols as independant entities):

$$\begin{aligned} A224924\left(n\right) &= \left[\sum_{j=0}^{n}\sum_{k=0}^{n}\right] bitand\left(j,k\right) \\ &= \left[\delta_{j}\sum_{k=0}^{n}\right] bitand\left(j,k\right) \\ &= \left[\delta_{j}\delta_{k}\right] bitand\left(j,k\right) \\ &= \left[\delta_{jk}+\not\delta_{jk}\right] bitand\left(j,k\right) \end{aligned} \tag{2}$$

If we adopt a more flexible version for the Einstein's summation convention allowing to assume summation over pairs of indices both either down-down or up-up (both covariant or both contravariant according the context of the tensor calculus), the original summations remain unchanged there. Now, continuing the non-conventional treatment:

$$\begin{aligned} A224924\left(n\right) &= \left[\delta_{jk}+\not\delta_{jk}\right] bitand\left(j,k\right) \\ &= \delta_{jk} bitand\left(j,k\right)+\not\delta_{jk} bitand\left(j,k\right) \end{aligned} \tag{3}$$

The "Kronecker Delta" implies a standard summation. Since it is valued 1 only when $j=k$, then we are allowed to replace both j and k with a single index:

$$\begin{aligned} A224924\left(n\right) &= \delta_{jk} bitand\left(j,k\right)+\not\delta_{jk} bitand\left(j,k\right) \\ &= \sum_{i=0}^{n} bitand\left(i,i\right)+\not\delta_{jk} bitand\left(j,k\right) \\ &= \sum_{i=0}^{n} i+\not\delta_{jk} bitand\left(j,k\right) \\ &= \frac{1}{2}n\left(n+1\right)+\not\delta_{jk} bitand\left(j,k\right) \\ &= A000217(n)+\not\delta_{jk} bitand\left(j,k\right) \\ &= A000217(n)+\not\epsilon_{jk}\left[bitand\left(\mathbf{j},k\right)+bitand\left(\mathbf{k},j\right)\right] \\ &= A000217(n)+\mathbf{2}\sum_{j=0}^{(n-1)}\sum_{k=(j+1)}^{n} bitand\left(j,k\right) \end{aligned} \tag{4}$$

Therefore:

$$A224924\left(n\right)-A000217(n)=0 \mod 2 \tag{5}$$

Both sequences have the same parity.

Also both sequences shares the following property[1]:

$$a\left(2^n\right) = a\left(2^n - 1\right) + 2^n \tag{6}$$

Now by solving for 2^n in each case we can state the identity:

$$A224924\left(2^n\right) - A224924\left(2^n - 1\right) = A000217\left(2^n\right) - A000217\left(2^n - 1\right) \tag{7}$$

Then, re-arranging terms in (7) we realize that[2]:

$$A224924\left(2^n\right) - A000217\left(2^n\right) = A224924\left(2^n - 1\right) - A000217\left(2^n - 1\right) \tag{8}$$

[1] For A000217, it is direct to verify this property by definition.
[2] This was observed by first time empirically.