

ABSTRACT

Embodiments of this application relate to the field of chip technologies, and provide a floating-point data precision conversion method and apparatus, reducing a conversion error during conversion from high-precision data into low-precision data. A specific solution is: determining a bit width of a second mantissa field based on a coded value of a first exponent field; determining a reserved coded value and a discarded coded value in a first mantissa field, where the reserved coded value includes a coded value that starts from a most significant bit in the first mantissa field and whose bit width is the same as the bit width of the second mantissa field; and if the coded value of the first exponent field is greater than or equal to a first preset threshold, performing a rounding operation on the reserved coded value based on a coded value that starts from a most significant bit and whose bit width is a preset bit width in the discarded coded value, to obtain a coded value of the second mantissa field; or if the coded value of the first exponent field is less than the first preset threshold, performing a rounding operation on the reserved coded value based on the most significant bit of the discarded coded value, to obtain the coded value of the second mantissa field. Embodiments of this application are applied to a process of floating-point data precision conversion.