The low-temperature specific heat of Co-doped BaFe$_2$As$_2$ JIUNN-YUAN LIN, Institute of Physics, National Chiao Tung University, Hsinchu 30010, Taiwan — We have measured the low-temperature specific heat of Ba(Fe$_{1-x}$Co$_x$)$_2$As$_2$ ($x=0,0.08,0.2$) single crystals. The electronic specific heat of Ba(Fe$_{0.92}$Co$_{0.08}$)$_2$As$_2$ in the superconducting state with $T_c=21$ K is revealed. A $T^2$ term was observed at low temperatures, providing the evidence of nodes in the gap. Furthermore, the data suggest a multi-gap feature for Ba(Fe$_{0.92}$Co$_{0.08}$)$_2$As$_2$. The mixed state data will also be reported.