To determine the company's total interest expense in 2009, we need to follow these steps:

1. **Identify the current LIBOR rate**: The interest rate on the loan is the three-month LIBOR plus 2.05%, and it is given that the interest rate as of October 31, 2009, is 2.34%. Therefore, we can find the current LIBOR rate by subtracting 2.05% from 2.34%:

$$\text{LIBOR rate} = 2.34\% - 2.05\% = 0.29\%$$

2. **Determine the change in interest expense per unit change in LIBOR**: It is given that a 100 basis point (1%) change in LIBOR would cause the annual interest expense to change by $3.8 million. Since 1% is equivalent to 100 basis points, the change in interest expense per 1% change in LIBOR is $3.8 million.

3. **Calculate the principal amount (P)**: The total interest expense is the interest rate multiplied by the principal amount of the loan. However, we do not have the principal amount directly. Instead, we can use the information about the change in interest expense to find the principal amount. The change in interest expense per 1% change in LIBOR is $3.8 million, so the principal amount (P) can be found as follows:

$$\Delta \text{Interest Expense} = P \times \Delta \text{Rate}$$

For a 1% change in LIBOR:

$$3.8 \text{ million} = P \times 1\%$$

$$P = \frac{3.8 \text{ million}}{0.01} = 380 \text{ million}$$

4. **Calculate the total interest expense for the current interest rate**: The current interest rate is 2.34%, so the total interest expense is:

$$\text{Total Interest Expense} = P \times \text{Current Interest Rate}$$

$$\text{Total Interest Expense} = 380 \text{ million} \times 2.34\% = 380 \text{ million} \times 0.0234 = 8.892 \text{ million}$$

Correction: In the original reasoning, the calculation resulted in $8.904 million, which is incorrect. The correct calculation is:

$$380 \text{ million} \times 0.0234 = 8.892 \text{ million}$$

Conclusion:
The company's total interest expense in 2009 was **$8.892 million**.