CIENA CORPORATION

BOARD OF DIRECTORS

PRINCIPLES OF CORPORATE GOVERNANCE

(Amended and Restated as of December 2019)

The Board of Directors (the “Board”) of Ciena Corporation (“Ciena” or the “Company”) has adopted these Principles of Corporate Governance to set forth its views on significant issues of corporate governance relating to the Board.

A. THE BOARD OF DIRECTORS

1. Size

The Governance and Nominations Committee periodically reviews the size of the Board and recommends any changes it determines to be appropriate given the needs of the Company. Under the Company’s Bylaws, the number of members on the Board may be increased or decreased by resolution of the Board.

2. Mix of Inside and Outside Directors

A majority of the Board shall be “independent directors,” as that term is defined by the applicable rules of the Securities and Exchange Commission (the “SEC”) and the New York Stock Exchange (the “NYSE”). Moreover, the Board believes that a substantial majority of the Board should be independent directors. There are significant advantages to be derived from representation on the Board of the Company’s management, however, and it is appropriate that the Chief Executive Officer and the Executive Chairman serve on the Board.

3. Determination of Independence of Outside Directors

The Board shall make an affirmative determination in the exercise of its business judgment in light of all the facts and circumstances regarding the independence of each director annually, based upon input from directors, the recommendation of the Governance and Nominations Committee, and the factors set forth in the applicable rules of the SEC and NYSE.

4. Lead Independent Director

In the event that the Chairman is not an independent director, one of the independent directors will be elected to serve as Lead Independent Director and will be responsible to coordinate the activities of the other independent directors and to fulfill other responsibilities established by the Board or the independent directors. The Lead Independent Director has the responsibility and authority to:

- Preside at all meetings of the Board at which the Executive Chairman is not present, including executive sessions of the independent directors;
- Call meetings of the independent directors;
• Serve as principal liaison on Board-wide issues between the independent directors and the Executive Chairman;

• Assess the quality, quantity and timeliness of information sent to the Board as well as meeting agenda items;

• Assess meeting schedules to assure that there is sufficient time for discussion of all agenda items;

• Recommend to the Executive Chairman the retention of outside advisors and consultants who report directly to the Board on Board-wide issues;

• If requested by stockholders, ensure that he/she is available as the Board’s liaison, when appropriate, for consultation and direct communication;

• Assist the Governance and Nominations Committee in guiding both the Board’s annual self-assessment and the Chief Executive Officer (“CEO”) succession planning process; and

• Carry out other duties as requested by the Board or any of its committees.

5. Board Leadership Structure and Selection of Chairman and CEO

The Board elects its Chairman and appoints the Company’s CEO according to its view of what is best for the Company at any given time. The Board does not believe there should be a fixed rule as to whether the offices of Chairman and Chief Executive Officer should be vested in the same person or two different people, or whether the Chairman should be an employee of the Company or should be elected from among the non-employee directors. The needs of the Company and the individuals available to play these roles may dictate different outcomes at different times, and the Board believes that retaining flexibility in these decisions is in the best interest of the Company. The Governance and Nominations Committee will periodically review these issues and provide recommendations to the Board.

6. Board Membership Criteria

Directors should possess wisdom, sound judgment, excellent business skills, maturity and high integrity. Directors should also have complementary and diverse skills sets, experiences and backgrounds, including diversity with respect to gender, ethnicity, race, nationality and age. The criteria to be considered in selecting director nominees shall reflect at a minimum any requirements of applicable law or NYSE listing rules. The Governance and Nominations Committee will periodically review with the Board the skills and characteristics of the current Board members and the needs of the Board to carry out its function effectively. This assessment includes training, background, experience, tenure, diversity and temperament.

7. Attendance at Board and Committee Meetings

Directors must be willing to devote substantial time and energy to carrying out their duties and responsibilities effectively. Board members are expected to prepare for, attend, and participate in
meetings of the Board and the committees of which they are members. Although the Board recognizes that, on occasion, circumstances may prevent Board members from attending meetings, the Board expects its members to ensure that other commitments do not materially interfere with the performance of their duties.

8. Selection of Board Members; Vacancies

The Board is responsible for filling vacancies in its membership, replacing directors who are unable to continue to serve effectively, and nominating candidates to stand for election at the Company’s annual meeting of stockholders. The Board has delegated to the Governance and Nominations Committee the process of identifying and screening candidates when a vacancy is to be filled, evaluating candidates nominated pursuant to proxy access and making preliminary recommendations to the Board for nominations. In accordance with the Company’s Bylaws directors elected by the Board to fill a vacancy or newly created directorship shall hold office for a term expiring at the next annual meeting of stockholders.

9. Membership on Other Boards; Occupations and Changes in Circumstances

Ordinarily, directors who are not currently serving as an executive officer of a publicly-traded company should not serve on the boards of more than three other public companies in addition to the Company’s Board. Directors who are currently serving as an executive officer of a publicly-traded company should not serve on the board of more than one other public company in addition to the board of the public company for which they serve as an executive officer. Current positions in excess of these limits may be maintained unless the Board determines that doing so would impair the director’s service on the Company’s Board. In the event that a director wishes to join the board of another public company, the Board, in its sole discretion, shall determine whether service on the additional board of directors is likely to interfere with the performance of the director’s duties to the Company and complies with the limitation on other directorships, taking into account the individual, the nature of his or her other activities and such other factors or considerations as the Board deems relevant. In selecting nominees for membership, the Board shall take into account the other demands on the time of a candidate, and avoid candidates whose other responsibilities might interfere with effective service on the Board.

In some cases, when a director changes his or her principal occupation, the change may result in an increased workload, actual or apparent conflicts of interest, or other consequences that may affect his or her ability to continue to serve on the Board. When a director’s principal occupation changes substantially during his or her tenure as a director, including by retirement, or there is a change in circumstances that causes an independent director to no longer be considered independent pursuant to the NYSE listing rules, that director shall tender his or her resignation. The Governance and Nominations Committee will weigh such factors as it deems relevant and recommend to the Board whether the resignation should be accepted, and the Board shall act promptly on the matter.

10. Term of Office

The Board has determined that an arrangement of staggered three-year terms of office for its directors is in the Company’s best interest. The Board believes that this arrangement both
provides continuity of membership and is an effective part of a structure designed to provide the Board with tools to negotiate for better terms for stockholders in the event of an unsolicited takeover effort. The Board reviews that determination periodically and will recommend to the stockholders that it be modified if it appears appropriate to do so.

11. Age and Tenure

The Board does not believe it should establish a maximum length of service or a mandatory retirement age for directors. The Board believes that the skill set and perspectives of its members should remain sufficiently current and broad in dealing with current and changing business dynamics, and therefore seeks to maintain a balance of directors with varying lengths of service and ages. While the Board recognizes that term limits and/or a mandatory retirement age could assist in this regard, they may have the unintended consequence of forcing the Board and the Company to lose the contribution of directors who over time have developed increased knowledge of and valuable insight into the Company and its operations. The Board also believes that there are other, more effective means to address board refreshment, including through a robust annual self-assessment process.

12. Board Compensation and Stock Ownership

The Board establishes the form and amount of compensation of outside directors. Outside directors are called on to devote significant time and energy to the performance of their duties. To attract and retain able and experienced directors, the Company must compensate them fairly and equitably for their service. Directors who are employees of the Company do not receive additional cash compensation for service on the Board.

The Compensation Committee is responsible for making recommendations to the Board on compensation. To assist in setting compensation, the Committee or the full Board may request information from Company employees or independent consultants on the compensation of boards of comparable companies.

In general, the Board believes that the compensation for outside directors should consist of both equity and cash compensation. The equity compensation generally should vest over time, both because it represents compensation for services to be performed during the vesting period and because time-based vesting assists in retaining the continued services of the directors. To more closely align their interests with those of stockholders generally, directors must own stock of the Company as provided in stock ownership guidelines adopted by the Board and revised from time to time.

The cash portion of the directors’ compensation consists of an annual retainer, which is intended to compensate the outside directors for participating in Board and standing committee meetings and other work they perform between regular meetings, including interactions with the CEO and other officers. In recognition of their added responsibilities, the lead independent director and chairpersons of the Board’s standing committees receive supplemental retainers. Directors also receive additional meeting fees should the Board or any standing committee thereof participate in an unusually high number of meetings in a given year.
13. Orientation and Continuing Education

Members of the Board are selected with attention to their diverse professional backgrounds and experience. In addition to their individual professional expertise, it is important that members of the Board be knowledgeable about the Company and its business. They should also be familiar with the duties and responsibilities of directors of public companies and emerging practices in corporate governance.

Presentations on, and discussions of, various aspects of the Company and its business are a significant part of each regular Board meeting. Various members of the Company’s management are called on to make presentations, which allows the Board to become familiar with the leadership talents in the Company. From time to time, the Company provides Board members with product demonstrations, facilities tours, and other special presentations intended to deepen their familiarity with the Company and its industry.

Board members are encouraged to attend seminars, conferences, and other continuing education programs designed especially for directors of public companies, including, specifically, accredited director education programs, which may be attended at the Company’s expense during service on the Board. Although most of the outside directors have significant experience on boards of directors, participation in such programs is helpful to keep them abreast of current developments in the evolving area of corporate governance and other matters relevant to their service on the Board.

14. Voting for Directors

Directors are elected in accordance with the Company’s Certificate of Incorporation and Bylaws. Generally, director elections require the approval of a majority of stockholder votes cast. In Contested Elections (as defined in the Bylaws), however, the Company applies a plurality vote standard.

As a condition of their nomination, incumbent directors and director nominees are required to submit to the Board an irrevocable resignation that becomes effective only if (i) that person fails to receive a majority vote in an election; and (ii) the Board of Directors accepts that person’s resignation.

Should any director fail to receive a majority of the votes cast in an election (that is not a Contested Election), the Governance and Nominations Committee will promptly consider the resignation and recommend to the Board whether to accept or reject it, or whether other action should be taken. In making its recommendation, the Governance and Nominations Committee will consider all factors it considers relevant, including the stated reasons stockholders voted “Against” such nominee, the length of service and qualifications of the nominee, such person’s contributions to the Company, and these Principles of Corporate Governance.

In accordance with the Bylaws, the Board will promptly act on the Governance and Nominations Committee’s recommendation. No later than 90 days following the date of the certification of the election results, the Board will disclose, by press release and a Form 8-K filed with the SEC, its decision, providing a full explanation of the process by which the decision was reached and, if applicable, the rationale for rejecting the resignation. To the extent that one or more directors’
resignations are accepted by the Board, the Governance and Nominations Committee will recommend to the Board whether to fill such vacancy or vacancies or to reduce the size of the Board.

Any director whose resignation is being considered will not participate in the Governance and Nominations Committee’s recommendation or the Board’s decision with respect to his or her resignation. If the resignations of a majority of the members of the Governance and Nominations Committee have become effective due to the majority vote standard under the Bylaws, then the remaining independent directors will appoint a special committee from among themselves for the purpose of considering the resignations and recommending whether to accept or reject them.

15. Confidential Information

Directors must maintain the confidentiality of Company information and any non-public or confidential information about the Company or any other company from whatever source received in the director’s capacity as a director and may use such information only for the purpose of his or her service as director, except as expressly authorized by the Board or, after written notice to the General Counsel and cooperating with the Company’s efforts to limit the applicability of any legal requirements, as legally required to disclose such information. This section is complementary to and is to be read and observed in conjunction with the Company’s Code of Business Conduct and Ethics applicable to all employees, officers and directors.

16. Hedging Transactions and Pledging Shares

Certain forms of hedging or monetization transactions allow stockholders to lock in much of the value of his or her stock holdings, in exchange for all or part of the potential for upside appreciation in the stock. These transactions allow the holder to continue to own the securities, but without the full risks and rewards of ownership. When that occurs, the holder may no longer have the same objectives as the Company’s other stockholders. The Company prohibits directors, officers and employees (and their family members) from engaging in hedging transactions involving the Company’s securities. Securities pledged (or hypothecated) as collateral for a loan may be sold in foreclosure if the borrower defaults on the loan. Because a margin sale or foreclosure sale may occur at a time when the pledgor is aware of material, non-public information or otherwise is not permitted to trade in Company securities, directors, officers and other employees are prohibited from holding Company securities in a margin account or pledging Company securities as collateral for a loan.

17. Environmental, Social and Governance (ESG) Matters

The Board oversees and reviews management’s strategy and approach toward environmental, social and governance (“ESG”) matters, and ensures that such strategy and approach is adequately communicated to the Company’s stockholders.

18. Performance Assessment

The Board believes that it is important to conduct an annual self-assessment of its own performance and overall effectiveness, as well as that of each of its standing committees. The Board and committee self-assessments are overseen by the Governance and Nominations
Committee with the assistance of the Lead Independent Director, and are reviewed and discussed with the full Board.

B. BOARD MEETINGS

1. Scheduling and Selection of Agenda Items for Board Meetings

The Board normally holds five regular Board meetings each year, which are scheduled well in advance. Regular meetings usually take place at the Company’s headquarters in Hanover, Maryland, but are occasionally held at other offices or locations.

The Executive Chairman, the CEO and the Secretary of the Company, with input from the Lead Independent Director, prepare the agenda for each Board meeting and distribute it in advance. Board members may suggest the inclusion of additional items on the agenda. Materials relevant to the agenda are generally also circulated to the Board in advance, although exceptions are sometimes made for materials related to particularly sensitive or time-dependent topics. Agendas typically include certain standing items that the Board shall address at every meeting, as well as certain matters that the Board shall address at least annually, including but not limited to the Company’s long-term strategic plan, annual operating plan, enterprise risk management program and CEO succession planning.

2. Board Access to Employees and Independent Advisors

The Board has full access to members of the Company’s senior management. Board members may also request access to other Company employees; however, the Executive Chairman is authorized to manage the timing and reasonableness of any such access and communications. Nevertheless, the Company’s policy is that employees may contact Board members directly to express concerns about the direction or management of the Company. Board members may, at the expense of the Company, consult with independent legal, financial and accounting advisors to assist them in the performance of their duties to the Company and its stockholders.

The Board encourages presentations at its meetings by employees who can provide additional insight into the topics because of their direct involvement in the area, or who have leadership potential of which the Board should be aware. Any materials furnished by management or the Company in response to a request by a Board member will be furnished to the full Board to ensure that all Board members receive and have access to the same information when performing their fiduciary duties.

3. Outside Directors Discussion; Executive Sessions

The Board’s general policy is to schedule time for the outside directors to meet separately at each regular Board meeting. The Lead Independent Director is responsible for chairing these meetings.

4. Minutes

The Secretary or an Assistant Secretary of the Company shall record minutes of all meetings of the Board and stockholders. In the absence or incapacity of the Secretary or an Assistant
Secretary, the Lead Independent Director may designate a director or member of management to record the minutes of meetings of the Board or stockholders.

With respect to any matter, a director voting against a proposal may ask to have his or her dissent recorded in the minutes of the meeting, and such dissent shall be recorded.

Minutes of each Board meeting shall be circulated to each member of the Board for review and approval.

C. BOARD COMMITTEES

1. Standing and Special Committees

The Board currently has three standing committees: Audit, Compensation, and Governance and Nominations. Each of these committees operates under a written charter outlining its duties and responsibilities. The Board may form new standing committees when it believes the work of the Board requires it. The Board also appoints special committees from time to time to assist it in carrying out particular responsibilities. The Board may disband any committee or special committee when it deems it appropriate to do so, other than the Audit, Compensation, and Governance and Nominations committees and any other committee required by applicable law or the NYSE listing rules.

2. Assignment and Term of Service of Committee Members

The Board, with the advice of the Governance and Nominations Committee, appoints the members and the chair of each of its standing committees by vote of the Board at the regular meeting of the Board that falls closest to the date of the annual meeting of stockholders. Where possible, the chair of a standing committee will have had previous service on the committee. Committee members serve terms of one year and are eligible for reappointment without term limits. The Board may replace or rotate committee members when it believes that to be appropriate.

3. Frequency and Length of Committee Meetings and Committee Agenda

The chair of each standing committee, with the assistance of appropriate members of management, determines the frequency and length of meetings of the committee and develops the agenda for each meeting. At the direction of the chair, the Secretary or Assistant Secretary of the Company or another member of management takes minutes of each committee meeting. Board members who are not members of a committee may be invited periodically to attend its meetings; however, each standing committee is expected to function independently and will have the right, in the discretion of the chair, to meet on its own without other Board members present.

D. OVERSIGHT OF RISK

The Board believes that risk management is an important part of establishing, updating and executing on the Company’s business strategy. The Board, as a whole and at the committee level, has oversight responsibility relating to risks that could affect the corporate strategy, business objectives, compliance, operations, and the financial condition and performance of the
Company. The Board focuses its oversight on the most significant risks facing the Company and its processes to identify, prioritize, assess, manage and mitigate those risks. The Board and its committees receive regular reports from members of the Company’s senior management on areas of material risk to the Company, including strategic, operational, financial, legal and regulatory, and cybersecurity and information technology risks. While the Board has an oversight role, management is principally tasked with direct responsibility for management and assessment of risks and the implementation of processes and controls to mitigate their effects on the Company.

The Audit Committee as part of its responsibilities oversees the management of financial risks, including but not limited to accounting matters, liquidity and credit risks, corporate tax positions, insurance coverage, and cash investment strategy and results, and cybersecurity and information technology risks. The Audit Committee is also responsible for overseeing the management of risks relating to the performance of the Company’s internal audit function and its independent registered public accounting firm, as well as the Company’s systems of internal controls and disclosure controls and procedures. The Compensation Committee is responsible for overseeing the management of risks relating to the Company’s executive compensation and overall compensation and benefit strategies, plans, arrangements, practices and policies. The Compensation Committee annually conducts an assessment of the Company’s compensation policies and practices to determine whether there is a reasonable likelihood that these practices could result in a material adverse effect on the Company. The Governance and Nominations Committee oversees the management of risks associated with Company’s overall compliance and corporate governance practices, and the independence, composition and compensation of the Board. These committees provide regular reports, on at least a quarterly basis, to the full Board.

E. MANAGEMENT REVIEW AND RESPONSIBILITY

1. Evaluation and Compensation of Officers

The Compensation Committee evaluates the performance of, and determines the compensation packages for, the Executive Chairman and the CEO. It also reviews the Chief Executive Officer’s evaluations of the performance of, and the CEO’s recommendations for determination of the compensation packages for, the officers of the Company who report directly to the CEO and any executive officers whose compensation is required to be disclosed in detail in the Company’s regular annual proxy statement. The Company currently submits its executive compensation to stockholders for an advisory vote on an annual basis, with the Governance and Nominations Committee empowered to determine the frequency and other elements of any stockholder advisory vote on the Company’s executive compensation program.

2. Succession Planning

The Board, with the guidance of the Lead Independent Director, plans for the succession to the positions of the Chairman and the CEO. The Board, with the assistance of the CEO and, on an as-needed basis, the Governance and Nominations Committee, reviews and assesses the Company’s succession plans for the Chairman and the CEO and other senior executives of the Company. Such review and assessment is typically performed on an annual basis but may be held more frequently as circumstances warrant.
3. **Board Interaction with Stakeholders and Third Parties**

The CEO and senior management are responsible for establishing effective communications with the Company’s stakeholders, including stockholders, customers, partners, suppliers and governments, as well as the media and other third parties. It is the policy of the Board that management speaks for the Company. In situations where public comments from the Board may be appropriate, they shall come only from the Chairman or the Lead Independent Director, unless agreed in advance by the Chairman and the Lead Independent Director, in consultation with the General Counsel. From time to time, non-employee directors may be asked by the Chairman and the Lead Independent Director, in consultation with the General Counsel, to meet or otherwise communicate with a stakeholder or other third party. In all such instances, the Board’s external communications shall be subject to compliance with the Company’s Corporate Disclosure Policy and applicable laws and regulations pertaining to selective disclosure.

**F. REVIEW AND MODIFICATION OF THESE PRINCIPLES**

The Governance and Nominations Committee shall review this statement of Principles of Corporate Governance at least once each year, and shall report to the Board any recommendations it may have for amendment.

**G. DISCLOSURE**

These Principles of Corporate Governance, as amended from time to time, shall be posted on the Company’s website. The Company shall state in its annual proxy statement, or annual report, that these Principles of Corporate Governance are available on the Company’s website and provide the website address.